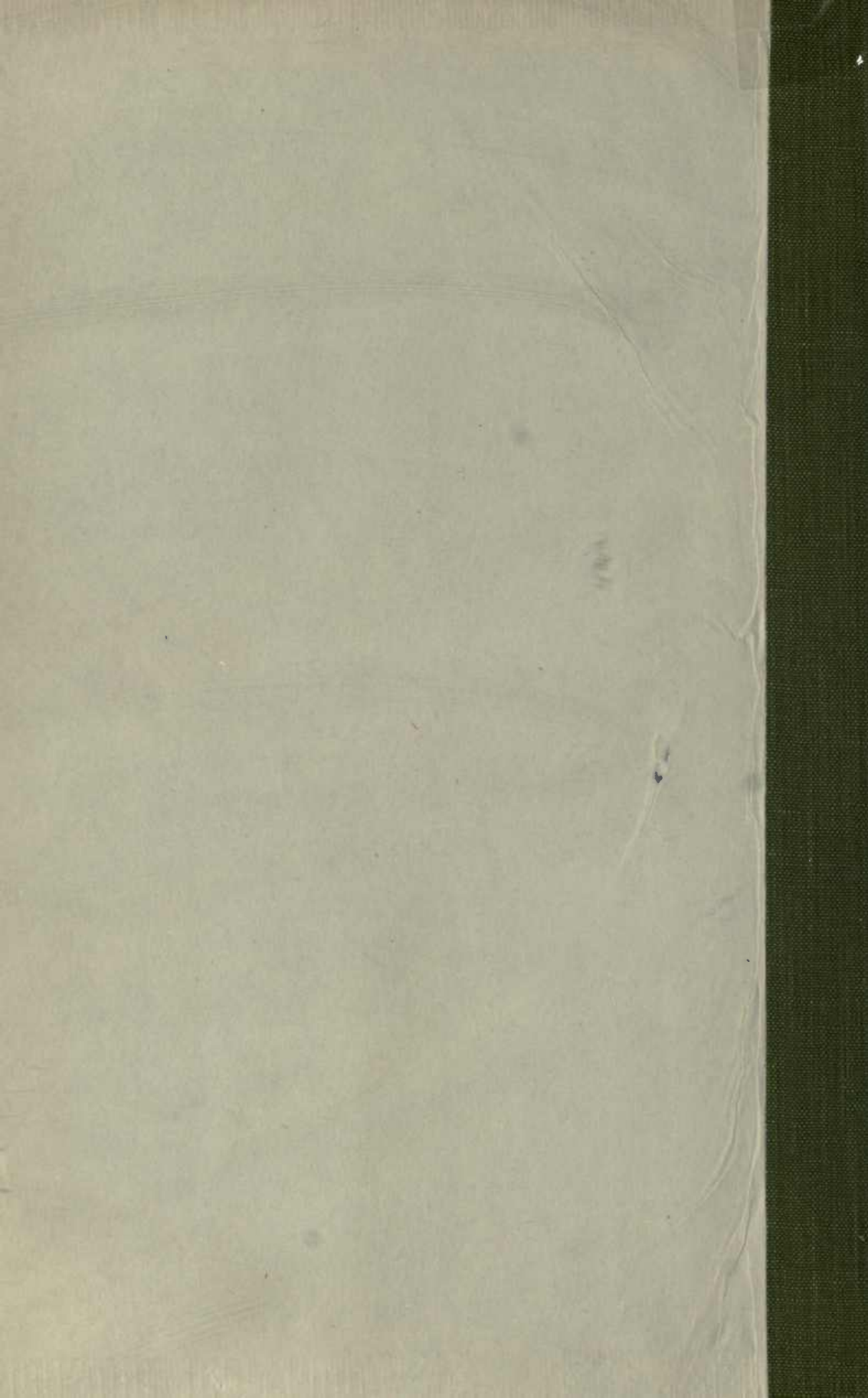


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XII

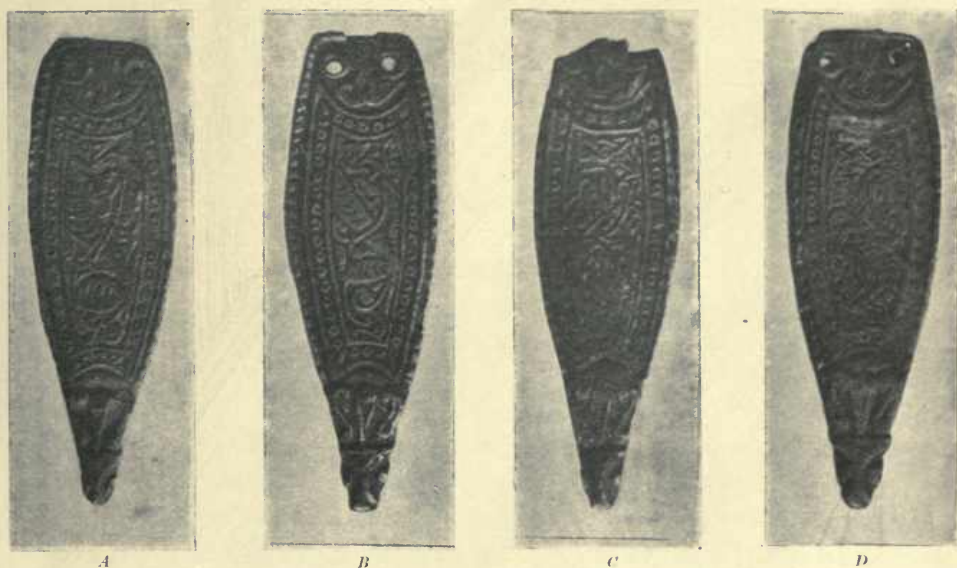


FIG. 1.—FOUR SILVER STRAP-TABS, A B C D, IN THE MAYER COLLECTION.



FIG. 3.—PART OF THE ORMSIDE CUP: SHOWING THE LATER RIM AND ONE OF THE CLAMPS.



FIG. 5.—IRISH PIN: ORNAMENT OF THE POINT.



FIG. 4.—IRISH PIN WITH KITE SHAPED HEAD.

NOTES ON EXAMPLES OF LATE ANGLO-SAXON METAL WORK

By E. THURLOW LEEDS, B.A., F.S.A.

WITH PLATE I

One of the less known epochs in the art history of Great Britain lies in the four centuries between 650 A.D. and the Norman Conquest, that is to say, the period of Christian Anglo-Saxondom. In reviewing the material for study, one point of note becomes apparent, namely, that while those branches of the applied arts represented by architecture, sculpture and the illumination of manuscripts are known to us from their application to ecclesiastical purposes, such relics as have come down to us of metal-work, whether in gold, silver or bronze, are almost exclusively of a secular character. There is nothing in England to vie with the wealth of ecclesiastical objects in metal which adorn the collections in the National Museum in Dublin. The importance of the Irish art of this period has long been recognised, but it is only comparatively recently that the prominence which they deserve has been given to the examples of the metal-smith's craft found in England, and that the existence of an Anglo-Saxon school as distinct from those of Ireland and the Continent has been insisted on. Stress has been laid on this point by Mr. Reginald A. Smith, F.S.A., in a paper on some silver objects found in the eighteenth century at St. Austell, Trehiddle, Cornwall,* and he has there referred to other well-known specimens. Others can be found in the various articles dealing with the Anglo-Saxon period in the Victoria County Histories. In view of the recognition of this Anglo-Saxon school, it is perhaps desirable that any further evidence of its existence should be recorded. During a recent visit to Liverpool, my attention was attracted by four silver strap-tabs in the Mayer Collection in the Public Museum, and by the courtesy of the authorities I was enabled to make a close examination of them and was further provided with an excellent photograph (Plate I,

* *Proc. Soc. Ant. London*, 2nd Series, XX, 47, originally described in *Archaeologia*, IX, 187.

1, *A.B.C.D.*) It is unfortunate that nothing is known of their provenance; they are merely designated by a number (Mayer Collection 12.6.79. 16-19).

These tabs appeared at first sight to be all exactly alike, but on a closer inspection it became evident that there were in reality two pairs. Although the principal feature of the ornamental design is different on each pair, and though the execution of the design even varies in the single members of either pair, yet they must all be regarded as beyond a doubt the work of one and the same craftsman.

The beaded rim, the dotted border to the central panel, the scroll design between the rivet holes, and the animal-head terminal at the pointed end are identical in both pairs. The designs on the central panels are of particular interest, as they exhibit the influence of two entirely different schools and thus furnish excellent evidence of the sources from which the Anglo-Saxon craftsman derived his motives. The design of the pair figured Plate I, figs. 1A and 1B, may be dealt with first. Here the panel is entirely filled by one monstrous animal-form twisted and contorted in order to adapt it to the space it is intended to decorate. Any blanks in the panel, not occupied by the animal itself, are embellished with stylistic foliage consisting of tendrils and leaves intertwined with the animal's limbs.

This class of zoomorphic ornament, with its blending of animal and leaf motives, has its roots in the Karolingian renaissance, and is marked by an attempt to break away from the stylised zoomorphic ornament, best known from Scandinavia, which had predominated in North-Western Europe during the preceding centuries. Its distinctive features are a striving towards naturalism and a return to classical models, which was only in part successful. In England, at any rate, this attempt but seldom gets beyond such grotesque forms as the present example. Numerous instances can be cited; the best is probably the silver objects from St. Austell above mentioned, but there is no such violent distortion, though the animals are still of a somewhat fanciful nature. The uncouth form on the tab is doubtless the Karolingian lion which supplied the basis for the greater part of the zoomorphic ornament of Scandinavia during the Viking

period.* This loan from the Continent falls, in point of mastery of design and technical skill, far behind that which appears on certain objects from Northumbria. The best known examples are perhaps the Bewcastle Cross and the Ormside Cup. It has been suggested that their execution is due to craftsmen from the Continent trained in the Byzantine school and introduced by Bishop Theodore. This theory is supported by the style of the runes and also the inscription on the Bewcastle Cross which would necessitate its being dated to *c.* 670 A.D. If this is correct, the ornament employed may be regarded as the earliest example of the naturalistic motives due to the renaissance. It may possibly have contributed to the diffusion of similar motives in other parts of England. The dagger pommel found near Windsort† (now in the Evans Collection in the Ashmolean Museum) is decorated with an exquisite design of intertwined vine tendrils terminating in almost microscopic bunches of grapes, evidently derived from the same source as the climbing vine on the Bewcastle Cross and other works of Northumbrian origin.

The main design on the second pair (Plate I, fig. 1 *C* and *D*) presents a marked contrast to that which I have just dealt with. Here the single animal is replaced by a complex pattern in which the principal feature consists of four animal heads, two on each side of the panel. These are linked together by ribbon-like bands, which are skilfully interwoven so as to cover the panel entirely. One half of the design is here given in outline, exclusive of the



PART OF THE DESIGN ON THE SILVER STRAP-TABS.
PLATE I, FIG. 1, *C* AND *D*.

knot at the upper end. In spite, however, of this marked dissimilarity in the general design, there are points of resemblance in the matter of detail. The style of the heads is identical, and

* SOPHUS MULLER, *Thierornamentik im Norden*, p. 146.

† Figured in *Victoria County History of Berks*, I, plate facing p. 240, fig. 2, *A-D*.

in both cases may be noticed the long protruding tongue. On the first pair of tabs it is made to serve as the vehicle for the introduction of leaf motives, while on the second pair, though unadorned except for a rounded end, it plays an important part in the completion of the knot-work design.

The history of this class of design takes us back to the Teutonic zoomorphic ornament of the fifth to eighth centuries. In its earlier stages it is well known in England from its occurrence on relics found in the graves of the pagan Anglo-Saxon settlers, but its subsequent development in this country is obscured by the establishment of Christianity in the seventh century and the consequent discontinuation of pagan burial customs. Only a glimpse of the second phase in its evolution remains in a few relics from the beginning of the century. In Scandinavia, however, ample material for study is preserved, and its leading characteristic at this stage has been shown to be a predilection for interlacing several animal forms.* Many examples consist of continuous patterns produced by blending animal heads in a ribbon-like design such as is seen on these tabs. It is conceivable that the tradition of this Teutonic style lingered on for some time in England, but—to anticipate a little—the gap of some two centuries between the date of these tabs and that of the latest known examples of the older style in England preclude us from tracing any immediate connexion between them. We find, however, in the early Christian art of Ireland the link that we need. The illuminated manuscripts from the Book of Durrow (c. 700 A.D.) onwards furnish us with numerous instances of similar patterns, and amongst them heads of the type employed on the tabs constantly occur. The crest projecting from the back of the head is often continued in a long narrow ribbon, and twisted into an intricate knot such as supplements the main design at the end of the panel of these tabs nearest to the rivet holes, nor is the long drawn-out tongue wanting.

The Anglo-Saxon craftsman of this period owed his design therefore rather directly to Irish models than to a survival of the older Teutonic ornament. It is just this mingling of Karolingian and Irish design that constitutes the basis of the later Anglo-Saxon

* SALIN, *Altgermanische Thierornamentik*, p. 249.

art, as exhibited on metal-work. It has no claims to any originality of its own; its distinctive character lies rather in its adaptation of the peculiarities of the two styles, resulting in a fusion to which no exact parallel can be found, either on the Continent or in Ireland.

It may be of interest to cite briefly those motives employed in the decoration of tabs and other metal objects which must be regarded as loans from Irish sources. Fairly common is the plait or knot design, illustrated by a tab from Youlgrave, Derbyshire, found with three others now in the British Museum; another, from York, is now in York Museum. Several examples of zoomorphic patterns borrowed from the same source are known, notably on the Wallingford Sword. In this case, as I have shown elsewhere,* some of the animals have a definite significance, being intended to represent the emblems of the four Evangelists. On this sword the Karolingian leaf motives are strongly to the fore. From Ireland, too, came apparently the design of two animals heraldically opposed with their necks crossing one another. This motive occurs on a second tab from the same find in York as that noticed above, and also on one found in Glenluce Sands, Wigtownshire, now in the Scottish National Museum at Edinburgh. An almost exact parallel, figured in the *Guide to the Celtic Christian Antiquities* in the collection of the Royal Irish Academy at Dublin (fig. 84), comes from one of the carved bones which it is surmised represent designers' or engravers' trial-pieces. To the Karolingian influence, on the other hand, must perhaps be ascribed the not unfrequent use of panels usually associated with beaded borders. It is admirably illustrated by silver bands from St. Austell, and a silver tab from Stratton, near Cirencester, all in the British Museum. At any rate, these panels occur most frequently with Karolingian designs.

As regards the date of these tabs, excellent indications are provided, apart from the style of the ornament, by their form, and also by the animal-head terminal, points which I have as yet left unnoticed. Firstly, the form is well known from numerous other examples, both in silver and bronze, many of which are approximately dated by their association with coins. Several

* *The Antiquary*, September, 1910, n.s., Vol. VI, 348.

isolated specimens, usually, however, of bronze and of small size, are to be found in various museums throughout England, and in many cases their real date does not seem to have been recognised. This is largely due to their insignificance, and often to the site from which they were procured. Two examples come from known Roman settlements, from Castor (Peterborough Museum), and from Woodeaton, near Oxford (Ashmolean Museum), but both these localities have yielded objects of earlier as well as of later date. Another such is that from Glenluce Sands found with other objects of various periods. Three instances may be noticed in which these tabs were associated with coins. A small bronze specimen was found at Sevington, Wilts, with four others, unornamented, a spoon and fork with engraved plaited design, and 70 coins ranging in date from Wulfrud, Archbishop of Canterbury (806-832), down to Aethelstan (878-890).*

Two small silver tabs are included in the St. Austell hoard, the chief feature of which was a silver cup containing 114 coins in all, of which only two were as late as Alfred. The third example belongs to the Cuerdale hoard, which, in addition to ingots, bracelets and miscellaneous pieces of silver, comprised a large number of coins from an investigation of which it has been conjectured that the hoard was buried about 911 A.D.†

The animal-head terminal does not perhaps afford a so certain indication of date as the coins, but it is worthy of remark as it brings these tabs into line with several well known examples of late Anglo-Saxon metal-work. The most noticeable feature of this terminal is the long 'comma'-like ears. This is perhaps the simplest method of describing their shape. Two of the silver bands from St. Austell terminate in heads of a similar character, but in this instance the ears are less gracefully formed. On one band the lower part of ear is almost square, a type which occurs on several tabs, including those from Sevington and Stratton and two from Youghgrave. The more graceful form is to be seen on one of those found in York with a skeleton, along with the chape of a dagger-sheath with a simple openwork design and other

* *Archaeologia*, XXVII, 301, and pl. 24 (now in the British Museum.)

† *Archaeological Journal*, IV, 190; *V.C.H.: Lancs.* I, 258; *British Numismatic Journal*, I, 9.

miscellaneous fragments of bronze. But more important than all these is the Alfred Jewel. Here we find the same comma-like ears, but reversed, that is to say, with the rounded upper end turned outwards instead of inwards. The socket for the eye is of similar shape. I am not concerned here to enter into the question of the enamel in the Jewel, as its Celtic origin seems to be fairly well established. This is not, however, the only Celtic feature; the form is almost certainly a loan from Irish personal ornaments of an earlier date. I refer to the pins with pendant kite-shaped heads attached to the pin itself by a hinge. The pointed end terminates, as in the Jewel, in an animal's head. A good example of uncertain Irish provenance (Plate I, figs. 4-5) is decorated with motives resembling those on the Tara and Hunterston ring-brooches.* The latter are not earlier than the beginning of the eighth century of our era, but there is apparently little means of proving how much longer the zoomorphic motives employed in their decoration persisted.

It is difficult to say from which side the peculiar shaped ear originated, but on the whole I am inclined to regard it as a non-Irish trait. I have been unable to find an example among a large series of edited pages of Irish illuminated manuscripts. The only parallels I have met with are on the head of an animal terminating the loop of the letter P in XPI, the initial word of Chap. I, v. 18, in the Gospel of St. Matthew, Codex 51 in the Library of St. Gall† and on animals' heads in the borders of two panels in the Psalter of St. Aethelstan,‡ given to that king by the Emperor Otto. The same method is adopted in the schematic rendering of the beard of St. Mark in Codex 51 of St. Gall,§ and also of the dress and skin in the emblems of St. Matthew and St. Mark in the Latin Gospels in the Imperial Library at Paris.|| The date of these latter Gospels is a matter of dispute. If they belong to the seventh century, we may suspect that this small peculiarity was picked up on the Continent by the Irish scribe. But if, as Westwood conjectures, the date of these, like the Codex

* For another example from Clonmacnois see J. R. ALLEN, *Celtic Art*, p. 220.

† WESTWOOD, *Miniatures*, pl. 26.

‡ *Idem*, pl. 32.

§ *Idem*, pl. 26.

|| *Idem*, pl. 21.

of St. Gall, is about 800 A.D., we have cumulative evidence of the source from which it came to be so commonly used in Anglo-Saxon metal-work. It is worthy of remark in this connexion that it occurs with greater frequency in association with ornament in the Karolingian style than with designs acquired through the medium of Irish art.

Nothing definite can be proved as to the identity of the person to whose order this magnificent jewel was made. But, taken in conjunction with the three instances quoted above in which tabs of the type described have been associated with coins, allows us to assign all these examples of metal-work to the latter half of the ninth century, the date to which some of them have been already assigned.* The Liverpool examples, hitherto, I believe, unpublished, add still more to our knowledge of the heterogeneous motives which were employed in the adornment of metal-work of this period, and which went to make up the later Anglo-Saxon art, an art notably displayed in the decoration of the Wallingford Sword.

Having thus arrived at a well-nigh definite conclusion as to the date of these tabs, we are enabled to apply the results thus attained to another famous piece of Anglo-Saxon metal-work, namely, the Ormside Cup, now in the Museum of the Philosophical Society at York. A full description of this cup, accompanied by excellent illustrations, is given by Professor W. G. Collingwood, F.S.A., in the *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society*, 1899, Vol. XV, 381 ff. The main decoration is executed in the same remarkable style which decorates the sides of the Bewcastle Cross, and on that account the manufacture of the cup is placed about the end of the seventh century. The rim of the cup appears, however, to be a later addition in the nature of a repair. This is demonstrated by the fact that the clips which secure the rim are placed at intervals round the cup, totally regardless of the repoussé design, a piece of clumsiness of which it is inconceivable that the original artificer of this remarkable work of art could ever have been guilty. On Plate I, fig. 3, an enlarged photograph of one clip is given,

* See labels in the British Museum.

where it will be noticed that the clip covers part of the original design. If further proof were needed that these clips were a subsequent addition, it only becomes too evident from the notch cut out of side and the consequent irregular disposition of the rivets.

I have to thank the Curator of the Museum of the York Philosophical Society for the excellent photograph, and for kind permission to publish it. Professor Collingwood, in drawing attention to this discrepancy in the fabric, offers a suggestion of a purely tentative character as to the author of the repair, a conjecture which I judge from a letter he kindly wrote me he would be the last to wish to be regarded as final.

The results of our previous investigations now permit us to assign with a large measure of certainty an approximate date to this repair also. The clips are fashioned with a finial in the form of animal heads similar to those on the tabs.* This might not be absolutely conclusive, but a closer inspection shows that these heads, like those on some of the tabs, are furnished with comma-like ears, and viewing the clip as a whole there is a decided resemblance in point of shape to the tabs, the form of which is so constant that it is impossible to regard them as having been in vogue during more than a limited period of time. We may therefore fairly claim that the date at which the Ormside Cup was put in the hands of an Anglo-Saxon repairer lies towards the end of the ninth or early in the tenth century.† Where its original home may have been it is impossible to say, further than that it was somewhere in Northumbria; but its deposition in the churchyard at Ormside may have been due to a desire to preserve it from the clutches of one of those raiding bands of Vikings who plundered Northumbria from the end of the eighth century onwards, or else it may have been lost in one of their hurried flights from pursuit such as, it is conjectured, caused them to relinquish the famous Cuerdale hoard.

* The eyes are of crystal; a parallel occurs in a bronze pryck-spur from Pakenham, Ixworth (Ashmolean Museum, Evans Collection.). Blue glass has been used for the eyes of three animal-head finials, strongly resembling those noticed above.

† Professor COLLINGWOOD suggests the ninth century, without any closer indication of date.

I desire, in conclusion, to express my gratitude to the Committee of the Free Public Museums at Liverpool for the courteous permission to publish the tabs, and to the Council of the Royal Irish Academy for the same privilege in respect of the interesting pin.

LAMPEDUSA, LAMPIONE, AND LINOSA

By T. ASHBY, D.LITT.

WITH PLATES II, III, IV.

In connection with the investigations into the prehistoric archaeology of the Western Mediterranean, now being carried on by the British School at Rome, a visit to Lampedusa and Linosa seemed to me to be of especial importance.

Pantelleria had been already thoroughly explored by Professor Orsi and Dr. Albert Mayr, and had given very interesting results;* for it had been shown that the prehistoric population was a branch of that race which came from North Africa (which is easily visible from Pantelleria) to Sicily, but that, remaining isolated, it had developed but little, and never emerged beyond the neolithic civilisation. Their characteristic tombs, the *Sesi*, find no exact parallels elsewhere in the Mediterranean: and as Mackenzie has pointed out, Orsi's comparison of them with the *Nuraghi* of Sardinia is misleading; what they really most closely resemble is the mound tombs of France.†

The prehistoric monuments of Malta, belonging also to the neolithic period, are of an entirely different character to those of Pantelleria; tombs are indeed conspicuous by their almost entire absence,‡ and so are the objects found in them, though the first inhabitants of Malta, as of Pantelleria, came in all probability from Africa.

It seemed, therefore, of especial interest and importance to ascertain what was to be found in Lampedusa and Linosa; whether they were inhabited in prehistoric times, and if so, what was the

* *Mon. Lincei*, IX (1899), 193 sqq.; *Röm. Mitt.* XIII (1898), 367 sqq.

† *The Tombs of the Giants and the Nuraghi of Sardinia in their West-European Relations*, 25 sqq.; reprinted from *Memnon* II, part 3.

‡ The first prehistoric tomb which has been recorded in Malta is that described by Dr. T. Zammit in the *Times* of December 13th, 1910. The hypogeum of Hal-Safieni was an immense ossuary. See *Liverpool Annals*, III (1910), 1 sqq.

nature and what were the affinities of the civilisation then existing. Remains of later periods were also to be expected; from the accounts already accessible, both islands had been inhabited, or at least visited, in Roman times, but neither island had ever been archaeologically explored.

I therefore determined to proceed there if possible, and was fortunate enough to be able to do so in June, 1909, during my visit to Malta, in the company of the Hon. E. P. S. Roupell, D.S.O., Assistant Secretary to the Government of Malta, Professor T. Zammit, Curator of the Museum, Associate (*honoris causa*) of the School, and Mr. T. E. Peet, Student of the School. The late Admiral The Hon. Sir Assheton Curzon-Howe, at that time Commander-in-Chief of the Mediterranean Fleet, was good enough to place a destroyer, H.M.S. 'Banshee,' at our disposal for the purpose, and to him and to Rear-Admiral Sir Frederick W. Fisher, then Admiral-Superintendent at Malta, my very best thanks are due, as also to Lieutenant and Commander Noble of the 'Banshee,' who was kindness and patience itself during a spell of windy weather, which obliged him to remain on board his ship at anchor outside Lampedusa harbour for the greater part of our stay there (June 10-12); for the harbour, though a good one for small craft, needs dredging (which is now in progress) before it will comfortably hold a ship of the length of a destroyer.

Mr. Percy Wyndham, Councillor of His Majesty's Embassy in Rome, was good enough to approach the Italian Ministry of Foreign Affairs on my behalf, and as a result the Prefect of the Province of Girgenti was requested to instruct the municipal and other authorities of Lampedusa and Linosa to do all in their power to facilitate our researches. But I cannot abstain from thanking these gentlemen warmly for the cordial kindness and hospitality with which we were received: to name individuals, where all were so helpful, would seem almost unnecessary.

As a result of these exceptionally favourable circumstances, I think I may say that we obtained as much information as we could have done in the course of a brief, though not hurried, visit, in which surface exploration was alone attempted. Excavation we did not, and do not, intend to attempt; that we leave to our Italian colleagues.

LAMPEDUSA

The island of Lampedusa, the largest of the group, is situated about 112 miles S.S.W. of Girgenti in Sicily (the capital of the province under the administration of which it is placed), but belongs geologically to the African continent, being situated on the edge of the submarine platform which extends along the east coast of Tunis, from which (at Mahadia) it is 90 miles distant eastwards. The rock is calcareous, and was until recent years covered with scrub in many places,* especially in the western half of the island, which was in the early nineteenth century separated from the cultivated eastern part by a wall built by Fernandez (see below), but is now almost entirely bare: and the soil is fertile in the valleys. The greatest length of the island is about seven miles; its greatest breadth is about two; and its highest point, at the N.W. extremity, is 436 feet (133 metres) above sea-level. Several classical geographers mention it. Strabo (XVII.3.16. p. 834) speaks of it under the name of Λοπαδοῦσσα (εἶτα Θάψος πόλις καὶ μετὰ ταύτην νῆσος πελαγία Λοπαδοῦσσα, εἶτα ἄκρα Ἀμμωνος), and Pliny as Lepadusa, Lipadusa, or Lopadusa (*H. N.* iii.8.92; v.7.41), who states in the passage cited last, that it is fifty miles N. of Cercina (really about ninety English miles N.E.), and six miles in length. Ptolemy (iv.3.12; p. 661 Müll.) mentions it as an island off Africa, and Stephanus of Byzantium as lying off Thapsus: both use the same form as Strabo (Λοπάδουσα) which Athenaeus (I p. 30D) explains as derived from λοπάδες or λεπάδες (limpets). Scylax, on the other hand (111), uses a form of the name far more closely akin to the modern, from which indeed the latter must be derived—Λαμπάς (αὕτη πύργους ἔχει δύο ἢ τρεῖς).†

That it was inhabited in Roman times is certain from the remains of a building in *opus reticulatum*, which exist near the castle (*infra*, p. 21).

* See the description of Sanvisente, *L'Isola di Lampedusa eretta a colonia*, Naples, 1849, p. 73, who mentions the wild olive as especially widespread. Apparently the first convicts were allowed to cut wood freely, with disastrous results; and there is now very little soil left, so that replanting would be difficult.

† Bres, *Malta Antica Illustrata* (Rome, 1816), p. 57, wrongly identifies Comino, the islet between Malta and Gozo, with Lampas.

It was seized by the Saracens, but they were expelled from it in 813 by Gregorius, the Byzantine admiral.*

During the Middle Ages nothing is known of it certainly, though it became the home of several legends: it was the Lipadosa of Ariosto's *Orlando Furioso*, the scene of the landing of Roger of Sicily, and of his conversion by the hermit;† and there is a Sicilian legend cited by Smyth, that two ladies of Palermo, Rosina and Clelia, the only survivors of a vessel wrecked on the island, found here two hermits, Sinibaldo and Guido, whom they married.

In 1436 it was given by Alfonso of Aragon to Don Giovanni de Caro, Baron of Montechiaro, who was his valet, according to Smyth, with permission to build a tower under baronial jurisdiction;* but it was never inhabited, on account, it is said, of the horrible spectres that haunted it.

In 1551, Andrea Doria, who had set out from Messina to provision the garrison of Mahadia, lost several ships and 1,000 men off Lampedusa.*

In 1553, the corsair Dragut is said to have carried off 1,000 of the population as slaves.*

In 1667† it was acquired by Ferdinando Tommasi, of Palermo, to whom was granted by Charles II of Spain the title of Prince of Lampedusa.*

In 1737† the Earl of Sandwich found only one inhabitant.‡

In 1760† some French settlers established themselves here under the protection of the Bali de Boccaye, who was resident at Malta, with a firman from the Turkish Government.* This official was, M. Roudanovsky informs me, head of the French Knights of St. John, being Bailli of the Auberge de France, and retaining the name (Bocage§) of the district in France in which he had previously been resident, as was usually done at that period. The Turkish firman was necessary inasmuch as these islands, though judicially considered (in this instance, at least) to be under the

*These statements are taken from Sanvisente, p. 105 *sqq.*

† These statements are taken from the *Encyclopaedia Britannica*, ninth edition, *s.v.*

‡ See also Moreri. *Grand Dictionnaire Historique*, Paris, 1732, Vol. IV, p. 497, quoted p. 27 below.

§ Bocage is a name applied to several districts in France (meaning imply woodland), but especially to the wooded parts of Normandy and at Poitou, Bouillet, *Dict. Universel d'Historie et de Géographie*, *s.v.*

Knights of Malta, might always be exposed to Turkish attacks. The consent of the Prince of Lampedusa does not seem to have been asked or obtained. Catherine II of Russia proposed to purchase it as a Russian naval station, and the British Government thought of doing the same, had Napoleon succeeded in seizing Malta.†

In 1783 several individuals were afflicted with plague from Africa, and the Sicilian Government sent the doctor Antonio Corsi, of Trapani, there; he returned to Palermo in 1784.* There is a stone still to be seen near the so-called Grotta della Regina, bearing the inscription 'qui trovasi un cadavere morto di peste in Giugno 1784,' and I saw a similar inscription, with the last letters in each line missing, in the garden of the Castello.

In 1800 a certain amount of land was let by the Princess of Lampedusa to the Maltese family of Gatt, and in 1810, Salvatore Gatt sub-let a portion of this to Alessandro Fernandez, who hoped to develop it commercially, and established there a colony of three hundred persons. The castle, which must, as Abela says,‡ have been of much older origin, was re-constructed at this period.*

In 1814-16, the island was visited by Captain W. H. Smyth for the formation of the Admiralty Chart; the plate engraved after his drawings, with slight corrections, is still retained. He gives a brief account of it in his *Sicily and its islands* (London, 1824, 285 *sqq.*). He found the family of Mr. Fernandez in almost deserted solitude in a house near the great cave, and twelve or fourteen Maltese peasants in the various caves.

In 1843, the rights of the Gatt family having already lapsed owing to non-payment of rent, the island was formally taken possession of by the Sicilian authorities, Ferdinand II having ordered the establishment of a colony there. Twenty-four Maltese still remained, of whom some proceeded to Malta, others to Sfax, on the Tunisian coast. The colony was a colony of free men: it was only later that a penal settlement was added to it.

Some descendants of the Maltese inhabitants still live in the island, although they no longer speak Maltese. I am informed by Mr. Cremona, Assistant Archivist of the Government Archives in

† He gives (*Descrittione di Malta* (Malta, 1647) p. 247 *sqq.*) a facsimile of an inscription in Gothic characters, which he saw on the upper part of the façade of an old castle, or tower [despite Sanvisente's objections, I think he must be referring to the castle at the harbour], and copied in 1610. It runs as follows: 'Bartolomeus de Marsara [Marsala] dictu Jan Crassu me fecci fare ani prima indictio.'

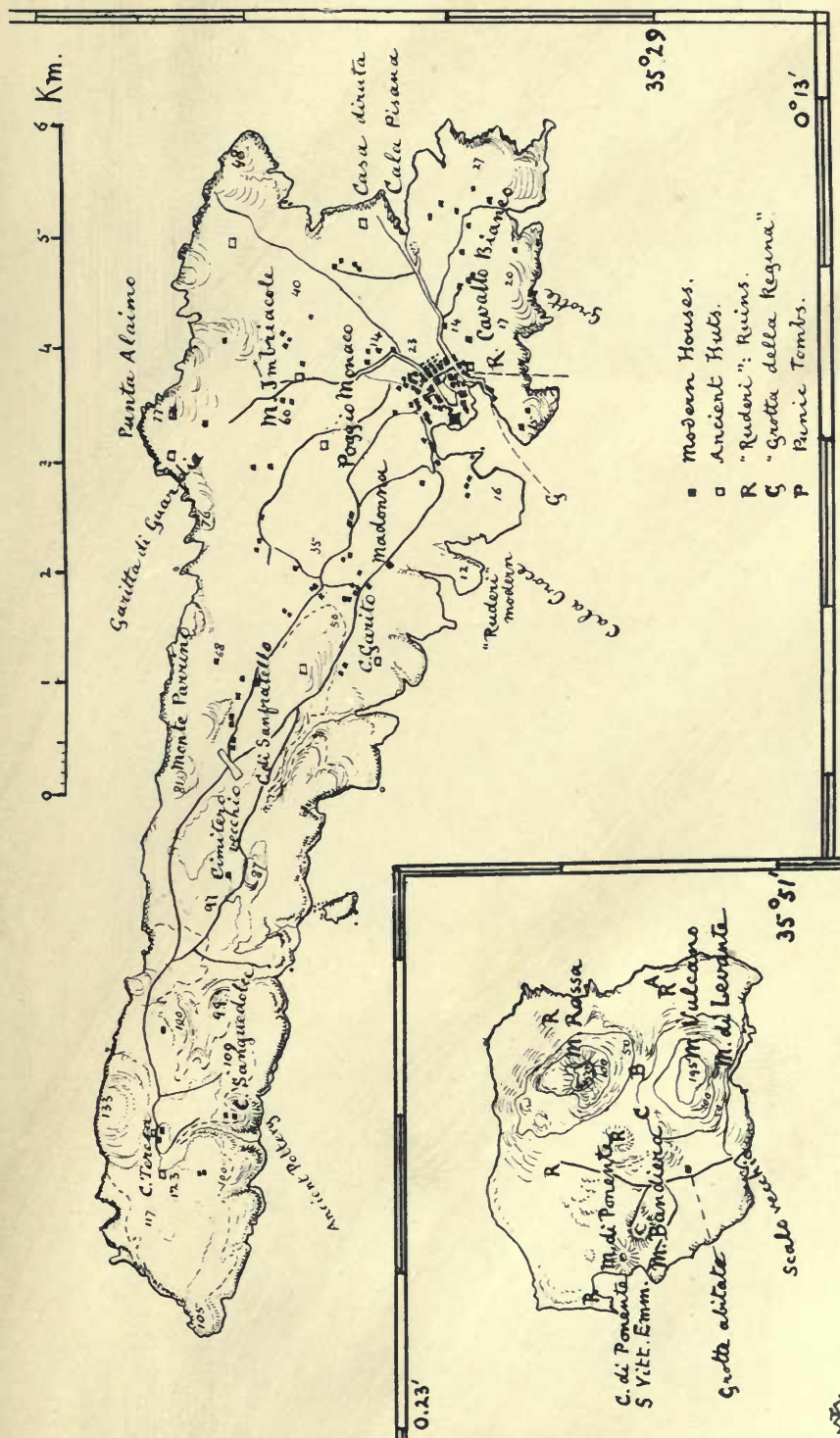
Valletta, that he knows of no documents relating to Lampedusa, or to the connection of the Gatt or Fernandez families with it.

In 1849, Cavaliere B. Sanvisente, a captain in the Neapolitan Navy, who had established the colony and had been Governor of the island since its foundation, published at Naples the work to which allusion has already been made, *L'isola di Lampedusa eretta a colonia*.^{*} It is the only work dealing in detail with Lampedusa, and describes it elaborately (pp. 1-113) with chapters on the physical geography, meteorology, geology, flora and fauna of the island, and a detailed map. At the end is a short notice of Linosa and Lampione.

We were successful in finding indisputable evidence that Lampedusa was inhabited in prehistoric times. Indeed, as was the case in Sardinia, it seems to have been more thickly populated then than at any subsequent epoch, and hut foundations were noticed at several points in the island: see the map, Plate II, which is adapted from the Italian Staff Map (Fol. 265 II; Scale, 1-50,000).

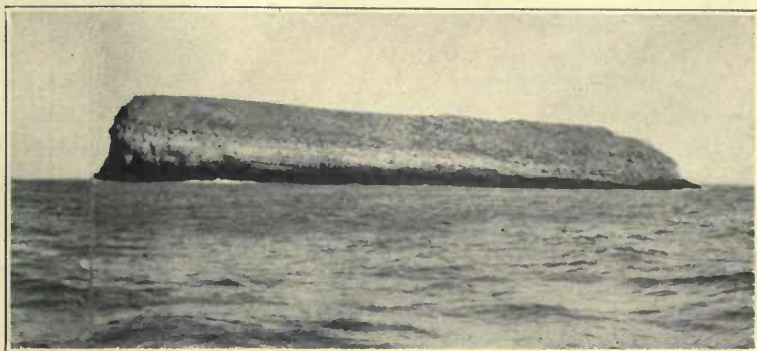
The day after our arrival (June 11th) was devoted to an excursion to the western extremity of the island. The first remains observed were to the west of the Casa Garito. Here we could trace a portion of a single curving line of stones, none of them more than two or three feet long or broad. Further down towards the coast were several walls of smaller stones, running east and west, which had the appearance of later boundary walls, and the rough pottery found among them was not prehistoric. Further west were similar lines of stones of uncertain character. Following the southernmost of the two paths, we noticed no other remains of the kind until after its junction with the northern path, which takes place just west of the boundary wall crossing the island from north to south, which is shown in Sanvisente's map as the 'old wall' (Muro vecchio). Then, in a field to the S.W. of the Casa Sanguedolce (I cannot give the point exactly), we saw on the surface a good specimen of a small oval rubber of porous lava (*infra*, p. 32) and fragments of others, some fragments of prehistoric pottery and of obsidian, and some sea-shells. The farmer told us that there was pottery about one metre below the

^{*}I have not been able to consult P. Calcara, *Descrizione dell' Isola di Lampedusa*, Palermo, Stamperia Pagano, 1847, cited by Calcara, *Descrizione dell' Isola di Linosa*, Palermo, 1851, p. 8, note 1.



Redrawn by permission and slightly reduced from the Italian Ordnance Survey-sheet 265.

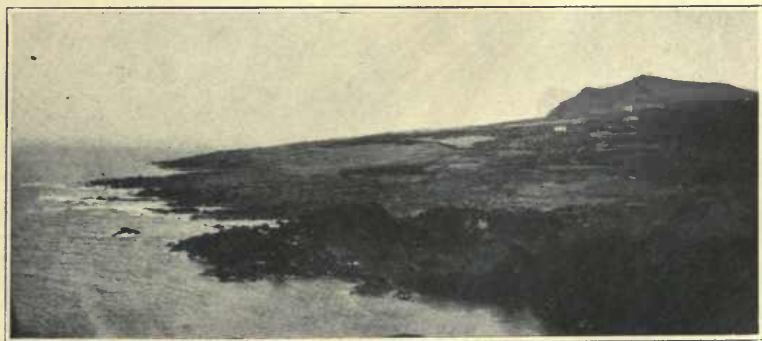
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1. ISOLA DI LAMPIONE.



2. LINOSA: CRATER OF MONTAGNA ROSSA.



3. LINOSA: EAST COAST.

surface, and that he had destroyed 'a circular house' to reach it. Whether this was a prehistoric hut or a more recent threshing floor we could not ascertain.

Further south-west is the Casa Teresa, the curious architecture of which is worthy of note. The construction is of a very solid character: the interior has a heavy vaulted ceiling, and is lighted by small, narrow windows; over the vault is a mound of earth, and upon that a thatched roof, upon which stones are placed owing to the prevalence of high winds (Plate III, 1). We see here the persistence of traditional forms down to quite modern days: the Casa Sanguedolce, which is precisely similar, was, we were told, only three years old.

To the west we observed the foundations of a roughly rectangular building, with the west end curved, measuring about $9\frac{1}{2}$ metres from east to west, and $8\frac{1}{2}$ from north to south. At the north-east angle was a rectangular chamber, the east side of which, composed of five stones, was 4.3 metres long, while the west side was three metres long, and the narrower north side 1.8 metres. The largest stone noticed measured 0.95 metre high, 0.75 metre wide, 0.55 metre thick; one of the fallen stones had a hole in it, but they were otherwise unworked.

Returning by the northern path, after passing the Cimitero Vecchio, in the locality called Sanfratello, we came across quite a large group of hut circles, occupying a tongue of rock isolated on every side except on the W.N.W., and overlooking the valley through which the path to the modern town runs. I am unluckily unable to fix the point exactly on the map, which is on a small scale, but have done so as best I could. The hut foundations are in all cases formed of orthostatic blocks, quite unworked, not as a rule more than one metre high or long. In the best preserved specimens we see that the plan was slightly oval rather than round, and that the wall consisted of two concentric lines of blocks, with a packing of earth and stones between them; above this, in two cases, we see the beginning of coursed masonry of thin slabs, very rough, with wide intervals between them. We thus get, in a rudimentary form, the combination of orthostatic slabs and ashlar masonry characteristic of the 'tombs of the giants' of Sardinia, and other prehistoric buildings of the Western Mediterranean and in the

British Isles (Mackenzie, *Memnon* II, p. 21 *sqq.*). The measurements of a few of them may be noted; owing to the lateness of the hour, satisfactory photographs could not be secured. One of them, which had only eight stones in its circuit, had internal diameters of 2·70 and 2·30 metres. Another, still more pronouncedly oval, had external diameters of 8·50 and 5·80 metres, and corresponding internal diameters of 6·40 and 3·40 metres, with a door opening one metre in width. A third, with a doorway 0·70 metre in width, and one diameter of 3·30 metres, was more rounded in shape, and in this the formation of the wall was seen, with the commencement of the ashlar masonry, in which a slight convergence of the sides in the interior could already be observed. Traces of walls joining the huts were also to be seen, as in the nuraghe town at Serucci, near Gonnesa in Sardinia (see Mackenzie, *Ausonia* III (1908), 38).

Prehistoric pottery and sea-shells, the latter no doubt remains of food, were found on the site, which would well repay clearing and planning, though the depth of soil is insignificant.

Further east, just above the path to the town, in the Contrada Camposanto Vecchio (so we were told, though the map seems hardly consistent with this), in the locality called Poie del Parrino, near the property of Francesco Famolaro, we were shown some mounds of small stones, apparently with an edging of larger ones; one of these, oval in shape, measured some four metres by three.

There was no pottery to be seen, and their antiquity was thus uncertain.

On the following day (June 12th) we visited the north-eastern portion of the island.

The first traces of huts we saw were in the district known as Sopra Imbriacole, north of the Poggio Monaco, on the south-west side of the valley along which the path followed on the return on the previous day runs to the village. A group of huts here, one of which was about five metres in diameter, occupied a fine position on a hill between two valleys, commanding the approach to the fertile part of the island and to the harbour.

A group of mounds exists to the north-east, to the south-east of the summit of Monte Imbriacole (see map); but the large stones at the base have been removed for the modern field walls. Whether these were hut or tomb mounds is not certain; if the former, they are exceptional, as they do not occupy a good strategic position.

A large and important group occupied the bare and rocky plateau, which slopes slightly southwards from the high cliffs which form the abrupt north coast of the island. On this side a landing is impossible, so that the inhabitants of these huts could not be surprised from the sea, while southwards they enjoyed an uninterrupted view.

Going eastward from the ruined Garitta di Guardia, or guard-house, they are very numerous; the stones are rough, quite unhewn, but, in accordance with the nature of the rock, are slabs rather than blocks, being thinner than elsewhere, and measuring some 1·00 metre long, and 0·15 to 0·30 metre thick. There is very little soil, and they rest almost on the bare rock.

In one case a hut close to the Punta Alaimo, 5·50 metres in diameter, has a floor partly of rock and partly of slabs cut to fit into the rock.

A view of the fine coast to the north is shown in Plate III, 2.

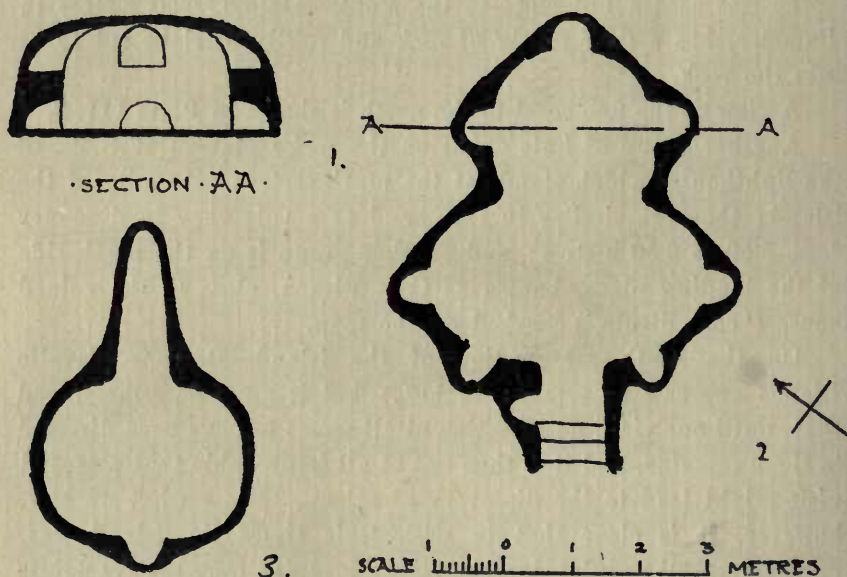
Another group of huts exists on the rocky plateau W.S.W. of the lighthouse, which stands at the north-eastern extremity of the island: they are similar in type, and as a rule vary in diameter from 5·50 to 6·50 metres; and another group is on the north side of the landing place, known as Cala Pisana, close to the ruined house ('casa diruta') marked on the map.

On the south-east portion of the island—Regione Cavallo Bianco—we saw no remains of huts; but it must be remembered that, until our visit, no attention at all seems to have been directed to these remains, and it is thus not at all improbable that a second visit might lead to the discovery of others. From what we saw, however, it is clear that in prehistoric times the island was, relatively, well populated. The points occupied were always points of vantage, so as to guard against sudden attack and to command a view of the surrounding country. The most important settlement seems to have been that near Punta Alaimo, and next to it came that of Sanfratello. Observations must, however, be conducted with care, for there are numerous traces of foundations of buildings and numerous enclosure walls of fields in various parts of the island which are constructed of smaller stones, and in a way which indicates that they belong to far more recent times.

The pottery found is scanty and indefinite. The obsidian and

lava must be imported, as the island is calcareous, either from Pantelleria or from Linosa, which is nearer. The existence of obsidian in the latter island was confirmed by some of the inhabitants, though we saw no specimens, while there was plenty of porous lava to be seen (see below, p. 32).

To the Punic period seems to belong a group of tombs to the south of the village, east of the harbour, cut in the rock. A plan and section of the best preserved of them are here given (figs. 1, 2), but there were at least six of them altogether. They closely resemble in plan the Punic tombs of Malta, near the catacomb of l'Abbatia-tad-Deyr (illustrated by Caruana, *Ancient Pagan Tombs and Christian Cemeteries* (Malta, 1898), 121 sqq.).



FIGS. 1, 2, 3.—SECTION AND PLANS OF PUNIC TOMBS EAST OF THE HARBOUR OF LAMPEDUSA.

Another tomb, close by, has a somewhat different plan (fig. 3). Sanvisente (p. 108) thus describes his investigations, apparently among these tombs: 'rinvenimmo una tomba delle ultime scavate che conteneva due persone di diverso sesso; e da una lampada entro di essa riposta, e da una colonnetta di marmo di figura piramidale tronca a base quadrata con delle armi, e cifre incise, ed apposte sul sito del capo, si vedeva dover tale tomba appartenere a

persona di alto rango. Finalmente nell' ultimo sepolcro dissotterrato, furono trovate alcune monete dell' epoche delle guerre puniche.' (cf. p. 105.) 'I sepolcreti nelle vicinanze della così detta Grotta della Regina con le monete in esse trovate vi hanno data la convinzione che nell' epoca delle guerre puniche i Romani vi risiedevano.'*

Some pottery, which was said to have been found in this group of tombs has unmistakable Punic characteristics. We especially noticed a funerary urn, a jug, a lachrymatory, a lamp with a very rough representation of a horse, and the mark M underneath (the letter is hollow). Another lamp, with an eagle with outstretched wings, belonged to the Roman period.

On the ridge above the valley of Aria Rossa, in the western portion of the island, is a group of round enclosures—possibly sheep-folds. Under one of them is a cave, from which various débris has been excavated, including some fragments of pottery, one of which was perhaps Punic.

There is, too, in Lampedusa a building which unmistakably belongs to the Roman period. It is situated in the garden, to the east of the Castello, and its plan (as far as excavated) is shown in fig. 4. It consists of a rectangular room 5·95 by 3·65 metres, with an apsidal room next to it, and reached by a door 0·95 metre wide, measuring 3·65 by 5·65 metres, the diameter of the apse, which is not symmetrically placed, being 2·6 metres. The exterior of the walls has not been cleared, so that their thickness is uncertain. Another buried apse lies some five metres to the south-west. It is constructed mainly of opus reticulatum (the faces of the cubes of which have a side of 0·075 metre), with brick and stone quoins; in one place, where the opus reticulatum rests on the rock, a void is filled up with small cubes of stone. There is brickwork in the lower part of the walls of the apsidal room, the bricks ranging from 0·03 to 0·04 metre thick, and the mortar from 0·015 to 0·021.

* 'We found a tomb among those excavated last, which contained two persons of different sex; and from a lamp placed between them, and a small column of marble, in the shape of a truncated pyramid with square base, and with weapons and signs cut on it, which was set close by their head, it seemed that such a tomb must have belonged to people of high rank. Finally, in the last tomb excavated were found some coins of the period of the Punic Wars.' 'The tombs of the neighbourhood of the so-called "Grotta della Regina," with the coins found in them, have satisfied me that it was at the time of the Punic Wars that the Romans settled there.'

The well measures some 1·20 by 1·80 metres, and is said to be 60 palms (some 13 metres) deep, thus going below sea-level, and having very salt water. It is probably, however, post-Roman.

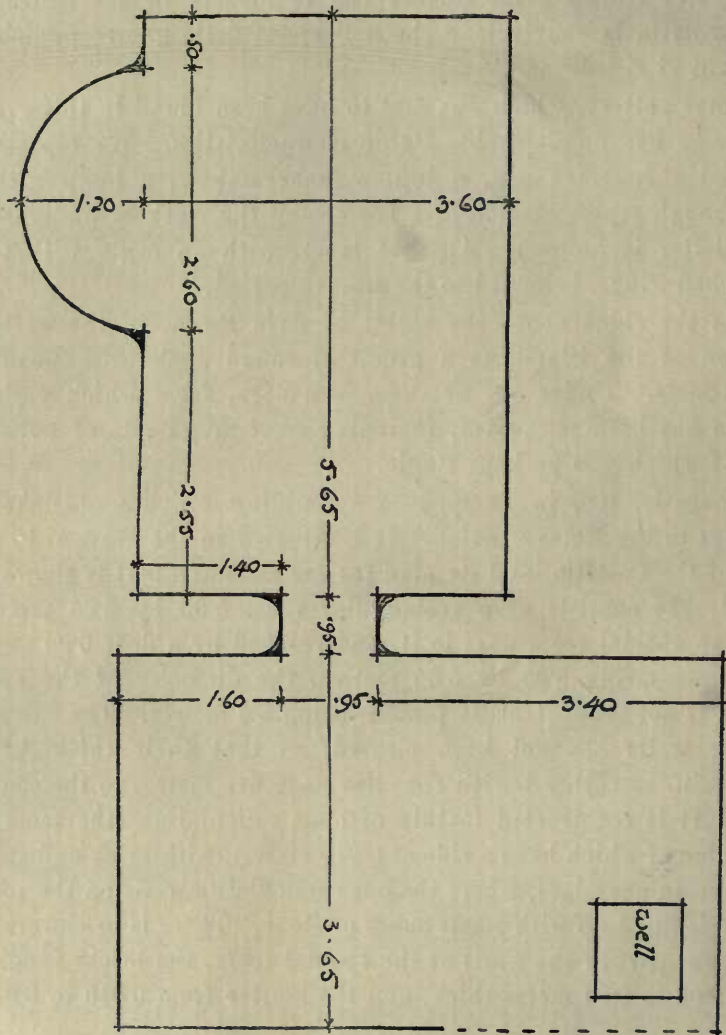


FIG. 4.—PLAN OF A ROMAN BUILDING EAST OF CASTELLO IN LAMPEDUSA.

There is also a hand-mill of porous lava, 0·40 metre in diameter, and a column base of limestone 0·43 metre in diameter and 0·105 metre high, with a square bolt-hole in the centre.

Another building which probably belongs to the Roman period lies to the south of the town, above the Grotta della Regina (a large cave, now used, like other caves near the harbour, as a fish-curing store) to the east. It measures 4·50 metres square inside; the walls, of concrete of small rough stones, are 0·55 metre thick, and lined with good cement. They contain small niches averaging 0·40 to 0·50 metre high and 0·25 metre wide; some are rectangular and some arched at the top. They are like the niches of a columbarium, but there are no traces of the urns having been let into the floor of the niche, as is usual in such buildings; here, however, they may have stood loose. There are traces of three cross walls within it, one of which looks like the beginning of a small stairway descending: and there are remains of walls adjoining it, and of subterranean chambers, belonging apparently to the same period. The door was on the south-west side. Within it was found, so I was told, a coin of Gordian, a second brass (Cohen 391). Obv.: IMP GORDIANVS PIVS FEL AVG; head with wreath to right. Rev.: VIRTVS AVG; S.C. in the field; Mars to left, olive branch in right hand, spear in left.

A gold Turkish coin was also said to have been found here. Outside the village, to the north-east, just where the houses end, a sarcophagus, with two bodies in it, was found in 1853, as I was told by its owner, Signor Michele Calcagno, in whose house it now is. It is of limestone, 1·99 metre long and 0·67 wide, and 0·60 deep outside; while the interior, which has each end curved, measures 1·83 metre long, 0·48 wide, and 0·46 deep. The cover was broken, and there is no inscription or decoration.

The proximity of these buildings to the harbour is noticeable; it does not seem that the interior of the island was at all extensively settled in Roman times. No trace of Roman harbour works is visible, and none would have been needed; for the harbour, though insufficient in depth for any but quite small steam craft in bad weather, is a good enough one for small sailing ships, and, when dredged throughout to a depth of four metres, will be quite sufficiently deep to accommodate destroyers.

Orsi (*Not. Scavi*, 1905, 452) published the photograph of a female statue found at Lampedusa in 1905 in making the foundations of a house in the village, and still preserved there.

The back is rough; the height, as preserved, is 1·31 metres. He conjectures that it may have been brought as ballast from Africa, but this seems improbable in view of the fact that other definite traces of habitation in Roman times have now become known.

We were also shown by the owner of the statue a threshold stone of dirty grey marble, measuring about 0·70 by 0·35 metres, found at the same time: and some other fragments, including a hand-mill found in the village. A Corinthian capital, however, which is preserved with these last, and measures 0·51 metre in height, with a lower diameter of 0·40 metre, was brought from the coast of Tunis.

The sponge fishers sometimes discover and bring back Roman antiquities. Thus, the Signori Aiello showed us in their store several amphorae of the usual type, and also a fragment of a bas-relief, 0·41 by 0·32 metre, carved on a slab of limestone 0·11 metre thick, representing a winged cherub, and perhaps belonging to a Christian sarcophagus (Plate III, 3).

I must now turn to mention the objects which have been found in the island without the site of their discovery being known. Sanvisente (p. 105) speaks somewhat vaguely on the subject, mentioning 'i monumenti antichi, le ferriere, le fabbriche, i bagni, le monete da noi rinvenute; locchè dimostra essere stata la medesima (isola) abitata da Greci, Romani, e Saraceni.' Further on he states that among the coins that he sent to the Duke of Cumia, the royal delegate with full powers for the colonisation of the islands, 'were coins of Syracuse and Agrigentum, coins of the period of the consuls and emperors of Rome, as, for example, of Mauritius, Gordian, Domitian, Gallienus, and Faustina; and also coins of the dark ages (bassi tempi), and Arab, Turkish, Venetian, French, and Maltese coins. One of these coins bore the representation of a head on one side, and on the reverse a wolf at whose teats sucked two children.' This last, of course, was a coin of the Roman Republic. 'Indeed,' he adds, 'an incontestable proof that the island was inhabited by ancient races is the quantity of hot baths (or hypocausts—he uses the word 'stufe'), of tombs, of amphorae, of lamps afterwards found, and the number of ruins and monuments which exist on every side.'

I noted all the coins that were shown to me as the result of our

enquiries; the list, not a very long one, of those that I could decipher, is as follows:—

Greek, Silvered.—Obv.: Bearded [?] head, looking to left.

Rev.: +IAETANY. Seated figure to right looking to left, with shield.*

Roman Republic, Small Brass.—Obv.: ? Rev.: Bull.

Commodus, First Brass.—Obv.: M. ANTONINVS COMMODVS AVG. Bust with wreath to right.

Rev.: VIRTVS AVGVSTI (in exergue).

(The legend TR P VII IMP IIII COS III P P was illegible.)

Commodus riding to right and striking a panther with a spear.

(Cohen 958, variety—if I was right in reading AVGVSTI for AVG.)

Third Brass.—Obv.: [IMP. LIC. LI]CINIVS PF AVG, head to right. Rev.: Standing figure to left with Victory in right hand. Licinius the elder (Cohen 67).

Third Brass.—Obv.:

Rev.:] ATIAS. Victory to right going to left.

Third Brass.—Obv.: IMP VALEN..... Rev.: Victory to right going to left.

Gold.—Obv.: D N HONORIVS P F AVG; head to right.

Rev.: VICTORIA AVGGG.; with M D in field, and COMOB in exergue. Male figure to right, with left foot on fallen figure; victory in left hand, spear in right, on which he leans. (Found in the garden of the Syndic, Cav. G. Brignone, opposite the so-called 'Sette Palazzi') (Cohen 44).

Second Brass of Justinian I of 549-50 A.D.

We were shown a similar coin at Sanguedolce.†

* [Mr. G. F. Hill thinks this may be Pergamene, with legend Φ]ιλετα[ί]ρoυ; if so, the 'bearded' aspect of the head is due to corrosion. J.L.M.]

† We were told that in making a cistern at Sanguedolce at a depth of 6 metres, two round, fluted, stones, about 0.05 metre in diameter, had been found, but given away; they were of local stone, and said to resemble sea-urchins: possibly they were fossilised ones!

There were various other buildings, which it was impossible to date with any degree of certainty, notably on the south-west edge of the paths below the huts, described on p. 18, in the locality called 'Sopra Imbriacole,' the foundations of a building in concrete which obviously existed before the path, and has been almost entirely destroyed by its construction.

A deep well close to this point, on the other side of the path, was, we were told, made by King Ferdinand, and is, no doubt, that mentioned by Sanvisente (p. 42 and note) as having been made in his time and giving an excellent supply of water.

Nor can the bell-shaped cisterns cut in the rock which sometimes occur be dated with any confidence, though the type is of Punic origin. They are common both in Malta and Linosa. An especially good specimen was shown us in the Contrada dei Gregali, N.N.E. of the village, with an opening 0.80 metre in diameter.

Nor is it possible to date with any confidence (in so far as they have been either formed or enlarged artificially) the numerous caves in the rocks on the east side of the picturesque Vallone della Madonna, nor to determine for certain their original purpose; no pottery could be seen there, and no coins or other objects were shown us.

According to Sanvisente (p. 45) there was a tradition that a Turkish sheik had been buried in one of them; and a heap of stones was to be seen there also, with a Christian symbol carved on it in bas-relief, to denote the tomb of a knight of Malta. The heap of stones we did not see, though we heard something of it, and a man at the house above the valley reported having discovered a body and a coin with it, which he could not at the moment find.

At the north end of the valley there is, as a fact, a piece of walling in good stonework, in which is an arched niche leading to a rectangular opening, and this to a large cistern formed in a natural fissure, the sides of which have been cemented to a height of about five feet. Over the niche is carved a cross with the date 1611 (?): the first two figures are certain, but the last two are not. Can this be the supposed tomb of the Knight of Malta? It seems not improbable, and it may have some connection with Abela's visit (*supra* p. 15).

The narrow valley is picturesque, and contains various fruit trees. Like several of the small valleys on the south of the island, in its eastern portion, it runs down to the sea and affords a landing for small boats.

The little chapel of the Madonna was restored by Sanvisente, who found it dilapidated, and it presents now no features of interest; but he notices that it served a double purpose, the outer chamber being used by the Arabs as a place of worship, while the statue of the Virgin and the altar were separated by a railing. This was no doubt the basis of the legend of the hermit of Lampedusa, who declared himself for Cross or Crescent, according to the religious views of his visitors.

Moreri, *Grand Dictionnaire Historique*, Paris, 1732, iv, 497, says: 'Lampedusa is deserted, and none the less celebrated, because there is a chapel dedicated to Our Lady, which serves as asylum for all the slaves, both Christians and Turks, who can escape thither. All the ships that touch there, which happens fairly often, leave there some provisions, clothes, and a sum of money; the Christians in one half of the Chapel, intended for the Christians, and the Turks in the other, which is for the Turks. It is said that whenever a sailor has dared to take the smallest thing, he has been unable to leave port until he has returned what he had taken. The galleys at Malta have the right to take the money which they find on the altar and carry it to Our Lady of Trapani in Sicily, where the image of the Virgin which was at Lampedusa has been transported.'

Coronelli, cited by Smyth (*op. cit.* 287), gives a somewhat different account:

'Even writers worthy of confidence assert that no one can reside in this island, on account of the phantasms, spectres, and horrible visions that appear in the night, repose and quiet being banished by the formidable apparitions and frightful dreams that fatally afflict with death-like terrors whoever does remain there as much as one night. The Turks are governed by a ridiculous superstitious idea, which is that no one would be able to go out of the island who did not leave something there, or who had the hardihood to take away the merest trifle. But the pure faith of the Knights of Malta is not so light and vain, for they annually go thither with their

galleys, and, collecting the offerings made to the fore-mentioned church, take them over to Malta, and there apply them to the support of the Hospital for the Infirm.'

A different legend, relating not to a statue, but to a picture, will be found in *Doctor Antonio*, a novel by Giovanni Ruffini, who, as a resident in the district of which he speaks, may be trusted as to local details of this kind. The scene is laid near Taggia, on the Italian Riviera; and here, near the village of Castellaro, is the sanctuary of the Madonna di Lampedusa, of which he gives the following account, my knowledge of which I owe to the kindness of Mr. W. Miller (p. 233 ed. Tauchnitz, Leipzig, 1861):

'All that relates to the miraculous image, and the date and mode of its translation to Castellaro, is given at full length in two inscriptions, one in Latin, the other in bad Italian verses, which are to be seen in the interior of the little chapel of the sanctuary. Andrea Anfosso, a native of Castellaro, being the captain of a privateer, was one day attacked and defeated by the Turks, and carried to the Isle of Lampedusa. Here he succeeded in making his escape and hiding himself until the Turkish vessel which had captured him left the island. Anfosso . . . set about building a boat, and . . . ventured on the bold and original step of taking from the altar of some church or chapel of the island a picture of the Madonna to serve as a sail; and so well did it answer his purpose, that he made an unusually prosperous voyage back to his native shores, and in a fit of generosity offered his holy sail to the worship of his fellow townsmen. . . . A place was chosen by universal acclamation, two gunshots in advance of the present sanctuary, and a chapel erected.' Then follows an account of how the picture was every morning found at the exact place where the actual church now stands, until 'at length the Castellini came to understand that it was the Madonna's express wish that her headquarters should be shifted to where her resemblance betook itself every night; and though it had pleased her to make choice of the most abrupt and steepest spot in the whole mountain, just where it was requisite to raise arches in order to lay a secure foundation for her sanctuary, the Castellini set themselves *con amore* to the task so clearly revealed to them, and this widely renowned chapel was completed. This took place

in 1619. In the course of time some rooms were annexed for the accommodation of visitors and pilgrims, and a terrace built.' Ruffini goes on to add that the picture is 'of small dimensions—something less than a yard high, and about two feet in breadth—containing three figures, Our Lady and the Divine Infant, with round each head a golden glory, and a St. Catherine by their side.' (p. 240.)

The only indication of ancient ruins on the Staff Map is on the hill to the west of Cala Croce, but they seem to be simply the remains of a modern house of no importance or interest, as far as I could make out through the glasses, and the same information was given me by Captain Francesco 'Torre, of the 34th Regiment of Infantry.*

He further added: 'In some points of the island, and especially on the hill called dell' Imbriacole, there are holes lined within with fragments of pottery which have the shape of large amphorae, of a capacity varying from one to two cubic metres, which are believed to have been used as water-cisterns for the Roman fleet, when it was operating against Carthage.' The allusion is no doubt to some bell-shaped cisterns like those mentioned above, but lined with cement, which I did not actually see.

LAMPIONE

The opportunity of visiting this islet, which lies some eight miles west of the western extremity of Lampedusa, seemed too good to be lost, and we therefore made our way thither on June 13th, the morning of our departure from Lampedusa.

It is a rocky and uninhabited islet (Plate IV, 1), accessible only from the east, from which it rises steeply towards the west side, where are cliffs just over 100 feet high (33 and 36 metres are the two levels marked on the Staff Map) going sheer into the sea. Our curiosity was fired by the following passage in Smyth (*op. cit.* 289): 'on its summit there are several vestiges of buildings, of an evidently ancient date, occupying a space of nearly 60 feet, of which one part had a roof, supported by an arch of good

* I desire to express my obligations to him, and to the Director of the Istituto Geografico Militare at Florence, through whose intervention I was brought into communication with him.

construction, which remains. The sides and bottom are covered with an excellent cement, well coloured, and in another part there are fragments of a tessellated pavement composed of irregular cubes of coarse marble.'

Sanvisente (p. 122) had obviously visited it also, but only notes the existence of two old habitations ('antichi abituri'). There are, as a fact, two groups of ruins upon it, one towards the south-east, but high up the slope, and the other on the northern extremity.

It is in the former that the arch mentioned by Smyth is to be found; it is about 2·20 metres in span, and is no doubt a cistern. The building to which it belongs is fairly extensive, but of irregular construction of small stones, and its date cannot be certainly fixed.

In the other group, which is mostly constructed of small stones, the N.N.E. wall has a foundation of large blocks, not exceeding, however, about three feet in height, which are unhewn; and on the W.N.W. side is a possible doorway 0·58 metre wide and 1·32 metres in depth, the sides of which appear to contract; the interior of the chamber, which is rectangular, is however constructed of small stones, and the whole is probably not archaic at all. The other rooms seem to be irregular in shape. No tessellated pavement was anywhere to be seen, either in this or in the other building.

A considerable quantity of Punic or Roman (?) pottery, but nothing prehistoric, was picked up.

LINOSA

Linosa lies about thirty miles to the north-north-east of Lampedusa, and about forty miles to the north-east of Lampione, from which we approached it. The island is only about two miles square, so that in the course of a few hours, under the guidance of the Syndic, to whom our best thanks are due, we were able to traverse and examine superficially the greater part of it. It is quite different to Lampedusa in character, being entirely of volcanic origin, and consequently of very picturesque outline and considerable fertility. In both islands the climate is good, and fever unknown, but here the air is even lighter and drier than at

Lampedusa, while, owing to the more varied outline, there is far greater protection from the prevailing winds.

As the map shows, there are a number of craters—two in the Montagna di Ponente, one to the east of the Monte Bandiera, and another to the north of it (these two being the largest), while the Montagna Rossa (610 feet) is another crater, the north-west side of which has been blown out (Plate IV, 2). The Cala di Ponente seems to be another crater ring, and the curve of the Montagna di Levante is probably the north half of another. The Monte Vulcano, on the other hand, the highest point in the island (640 feet) has no crater, and forms part of the edge of the large central crater east of Monte Bandiera.

There are two landing-places—the so-called Scalo Vecchio on the south, a little to the south of the modern village, which is most used, and the Scalo Vittorio Emanuele on the west.

Linosa has practically no history. *Αἶθουσα* (Aethusa) is mentioned next to Lopadusa by Ptolemy (*op. cit. supra*), cf. Pliny, N. H. iii, 92 (*Insulae in African versae Lopadusa, quam alii Aegusam scribunt*), who has confused it with Aegusa off Lilybaeum (Polyb. VI, 60, 4); while Müller thinks that *Ἀνέμουσα* which one MS. gives as an alternative to *Αἶθουσα* is identical with the modern name Linosa (medl. Limosa; in Edrisius, Nemousa). D'Avezac (*Iles de l'Afrique*, 119) identifies Anemosa with Linosa, Aethusa with Lampione, but quite wrongly, for Lampione is calcareous, whereas the name Aethusa well suits the volcanic Linosa. Besides the section of Sanvisente's work (pp. 114-121) which deals with it, there is a short monograph by Pietro Calcara, Professor of Natural History at Palermo, *Descrizione dell' Isola di Linosa*, Palermo, 1851 (but bearing date at the end, 'August 16th, 1846').

It was colonized from Lampedusa in 1845, when it was found to be uninhabited.

As far as our explorations and enquiries went, there were no traces of its having been, like Lampedusa, inhabited in prehistoric times. We were informed that obsidian was to be found there, though somewhat seldom, and especially on the Monte Lastre Buone, near the 'Ruderi' marked south by east of point 52. Whether the obsidian of Lampedusa was derived from Linosa or from Pantelleria, I do not know.

On the beach at the Scalo Vecchio we observed plenty of porous lava of the kind used in the rubbers which we saw at Lampedusa (p. 16); but these may as well have been brought from Pantelleria (cf. Orsi, *Mon. Linc.* IX, p. 207 and fig. 12) as from Linosa.

The fact that it was not colonized by settlers from Africa in the neolithic period may be due either to the activity of its volcanoes at that time (as indeed its classical name would imply), though all of them are now quiescent, and have apparently been so for a long period, or to the entire lack of springs. As Sanvisente says (p. 119), a well dug in the centre of the island (in the crater to the north-west of point 16) down to sea-level reached salt water, and the storage of rain-water in cisterns is the only means of obtaining a supply. Of these cisterns he saw no less than 153 (p. 105). They are cut in the rock with round mouths, thus preserving the traditional Punic type, and lined with cement; but whether, as he (p. 120)* and Calcara (p. 29) suppose, any of them are Roman, I should not like to say.

Nor can I agree with them in considering the ruins of houses which exist in various parts of the island to belong to the Roman period; they must, to my mind, be considerably later, and indeed of comparatively modern date. 'Ruderi' (ruins) are marked by the Italian Staff Map at four different points in the island, but in every case (except in that of those marked A, on the east side, which have apparently been destroyed for material for field walls), I could see nothing but ruins of houses or of the enclosure walls of fields or gardens contemporary with them. I did not, I must confess, see any of the construction 'with pieces of stone of the form of an elongated rhomboid,' described by Sanvisente.

In several places, on the other hand, we saw scanty remains of walling which in itself seems to be of quite uncertain date, but with indubitably Roman pottery lying about it.

The first was to the north-north-west of the modern village, at the bifurcation of the path leading to Monte di Ponente. Here are some scanty remains of concrete foundations, spoken of locally as

*Antichi abituri, e molti ruderi fanno con ragione asserire che numerosa popolazione vi è stata altra fiata, e dalla costruzione di qualche fabbrica con pezzi di figura romboidale allungate, dalla forma delle cisterne, dallo intonaco di esse, et dalle monete rinvenute si dimostra chiaramente che Linosa e Lampedusa furono anticamente abitate da popoli di una stessa nazione.

those of an old church; but we found a piece of Samian pottery, and a piece of apparently Roman glass, and were told that much other pottery and a coin had been found, but that the latter had been sold.

Two late Roman coins, which I could not identify, were given me, which were, I was told, found not very far off; they are now in the Valletta Museum.

On the west side of the Cala Ponente, similar foundations of uncertain date exist, and here we found the handle of an indubitably Roman lamp.

On the saddle which the path crosses from the west side of the island to the village (at the point marked B in the map), are ruins of uncertain date, again attributed to a church, where Roman pottery and flanged tiles occur; while further west, on the edge of the crater itself, above the path to the village (at the point marked C), we found several fragments of 'Samian' and false 'Samian' pottery, but no walls or foundations *in situ*; and the handle of an amphora of uncertain age was seen to the north-east of Montagna di Levante.

We have already seen that Calcara (pp. 29, 30) records the discovery both of Roman pottery and of Roman bronze coins, and his statement is thus shown to be correct in this respect.

The caves marked on the map 'grotte abitate' were in use as habitations until about thirty years ago. I could see no traces of antiquity in any of them. We heard confused accounts of burials (apparently mediaeval or modern) in some of them. Nor does the large cave to the west of the village, known as the 'brutta locanda,' or 'bad inn,' present any trace of antiquity.

A view of the east coast is given in Plate IV, 3.

It may seem that I have dwelt too long on unimportant details. Let my first excuse be the remoteness of the islands, and the difficulty of visiting them without loss of time. By taking the mail steamer which leaves Porto Empedocle each week, one can spend two nights on Linosa, but the time for visiting Lampedusa is either reduced to a few hours on each journey, or else extended to five days; and it is not always possible for the steamer, which is a small one, to make the voyage. Nor have the islands, so far as I

have been able to ascertain, ever been archaeologically explored before. We may well hope that some archaeological interest has been aroused in the breasts of our kind hosts, and that future casual discoveries will be carefully noticed, and the objects preserved.

The prehistoric remains of Lampedusa, at any rate, merit further exploration, for which a certain amount of clearing and excavation is indispensable; and this, as I have said, must be left to the Italian authorities, to whose attention I confidently commend this brief record of our journey.

GREEK INSCRIPTIONS FROM ASIA MINOR

By REV. M. LINTON SMITH, M.A., AND M. N. TOD, M.A.

WITH PLATE V.

[The following inscriptions were copied in the course of an expedition sent out in 1907 to Asia Minor, in connection with the Liverpool University Institute of Archaeology, and reported in Volume I of these ANNALS. As the object of the expedition was primarily to investigate the remains of pre-Hellenic (and especially Hittite) civilization, the route, which is shown on the map in Plate V, only occasionally passed a centre where many Greek inscriptions were likely to be found; nor was any attempt made to break new ground. As, moreover, the Greek language only prevailed in the interior of Asia Minor at a comparatively late date, most of the material collected falls within the period of Christian influence. It consists mainly of Christian funerary inscriptions, interesting only for their local variations, and for occasional references to the organization of the Byzantine Empire.

The route of the expedition ran from *Angora* (ANCYRA) through Galatia, Cappadocia, Cilicia, and Commagene: the most fruitful localities were the modern villages, near the site of TAVIUM, the cemeteries round *Missis* (MOPSUESTIA) and the deserted site of *Hürü Pegamber* (CYRRHUS) on the *Afrin* River. Only those inscriptions which have not been already published are printed in full: for the others, references are given to the books and periodicals in which they may be found.

The inscriptions were copied by Mr. Linton Smith, with occasional help from Professor Garstang, and other members of the expedition.

The references are contributed by Mr. Tod, University Lecturer in Epigraphy at Oxford; who has also revised and expanded Mr. Linton Smith's notes, and prepared the inscriptions for the press. The Institute of Archaeology gratefully acknowledges his ready help, most generously given. J.L.M.]

1. Angora (ANCYRA). Stone in the E. wall of the citadel, in the angle of the eleventh tower from the S. end: ca. 50 × 40 cm. The stone is some 20 feet from the ground, but examination with strong glasses showed no other lettering in the gaps *, which suggests that the slabs may have been kept in stock, the name being added for the purchaser. Letter forms, AEMΣΩ: in l. 4 NT are written in ligature.

Τὸ κοινὸν Σεβαστη|νῶν Γαλατῶν ἐτείμη|(σ)εν * * * Γάϊον Ἰούλιον|
Κοῦντον υἱόν.

The κοινόν here referred to is the provincial *concilium* of the province of Galatia. It is usually called τὸ κοινὸν τῶν Γαλατῶν or Γαλατῶν τὸ κοινόν (e.g. *C.I.G.*, 4017, 4039), but in an inscription of Pessinus (Dittenb. *O.G.I.* 540 ll. 8-10) we have a mention of an ἀρχιερεὺς τοῦ κοινοῦ Σεβαστηνῶν Γαλατῶν καὶ ἀγωνοθέτης. The city of Ancyra is called ἡ μητρόπολις τῆς Γαλατίας Σεβαστῇ Τεκτοσάγων Ἀγκυρα in *C.I.G.* 4011 (= Dittenb. *O.G.I.* 548) and in *C.I.G.* 4010 we have a reference to ἡ βουλὴ καὶ ὁ δῆμος Σεβαστηνῶν Τεκτοσάγων. Cf. *C.I.G.* 4085 (= Dittenb. *O.G.I.* 537).

2. Khatibin Keui. Stone built into the wall of the spring, south of the village. The stone is broken in half longitudinally.

[Ἐν]θα κ|[ατᾶ]κι(τ)ε |[ὁ δο]υλο|[ς τοῦ] Θεοῦ||- - ΟCΕ|- - ΦΕC|
- - ΠΕ|- - ΠΓΓ|- - Ο<Ι

After l. 5 is a gap, the width of two lines, showing no trace of lettering. Possibly we should restore [ὁ θε]οσε[βῆς or -βέστατος in ll. 5, 6.

3. Kutchuk Nefez Keui. Built into wall of house S.W. of village: 43 × 32 cm.

Ἐνθα κ[α]|τάκιτε| ἰ δούλ[η]|τοῦ Θε(ο)ῦ Δι|σερις +

Possibly a letter is lost at the end of l. 4 and we should read Δι[ο]σερις: but in either case the name remains a puzzle.

4. Kötlek. West wall of the mosque: 84 × 33 cm. The inscription is surmounted by a wheel, or double Greek cross, in a circle.

Ἐνθα κα|τάκιτε| ὁ δούλος| τοῦ Θε(ο)ῦ|| Γεώργιος| ταβου|λάριος.

For ταβουλάριος see Du Cange, *Gloss. med. et inf. Graec.*

5. Kötlek. Stone in the E. wall of the mosque, carefully cut: 85 × 32 cm. The inscription is surmounted by a Greek cross enclosed in a garland: the stone is broken above the arms of the cross.

[^νE]νθα|κατά|κίτε|ὁ δοῦ||λος| τοῦ Θ(εο)ῦ| 'Ελπί|δης.

The last word is a contracted form of 'Ελπίδιος: see Jannaris, *Hist. Gk. Gram.* § 1040. Cf. No. 16 (below).

6. Kötlek. House on the W. side of mosque: 107 × 46 cm.

^νΕνθα κα|τάκίτε| ἡ δούλη τοῦ| Θ(εο)ῦ 'Ηδία||ΚΟΣΗΕΓ|ΚΑΗΝΑ|ΤΙ.

Of the latter part of the inscription I can make nothing: 'Ηδία as a proper name occurs in Sterrett, *Epigraphical Journey in Asia Minor*, No. 268, and 'Ηδίστη, 'Ηδίστιον are common.

7. Kötlek. In house west of mosque: 31 × 25 cm. Letters of unequal height, ΟΩ being considerably smaller than the rest.

^νΕνθα κ[α]|τάκίτε ὁ| [δ]οῦλος το[ῦ]Θ(εο)ῦ| Γεώργι||ος
ν(ι)δ)ς Θεο|[δ]ωρήτου.

8. Kötlek. In a Moslem cemetery, one mile S. of the village: 114 × 50 cm. Inscription at foot of a long slab with incised cross, the base of which comes between the words of l. 1.

[^νE](νθ)α κατά|κίτε ὦ δοῦ|λος τοῦ Θ|εοῦ Μετε| - - -

9. Kötlek. West wall of mosque: 54 × 50 cm. Broken above and irregular on the left side.

[^νΕνθα κατά|κίτε ὁ θεοφι]|λέστατος| πρεσβύτε|ρος Δίθεο[ς]|ὀρθοῦ
βίου | πολιτευθί[ς]| καὶ πά(ντ)ον| φίλος.

In the last line but one my copy shows ΠΑΙΠΙΟΝ: of the correctness of the restoration there can be little doubt. I can find no parallel to the phrase ὀρθοῦ βίου πολιτευθί[ς], possibly suggested by St. Paul's use of πολιτεύομαι in Acts xxiii, 1. and Philip. i, 27 (cf. iii, 20): but πάντων φίλος occurs in an inscription from Salonica, probably pagan (*Ath. Mitt.* 1896, 98), in a pagan text from Temenothyrae (*C.I.G.* 3865) and in many other inscriptions, e.g. *Bull. Corr. Hell.* xxxiii, 62, *J.H.S.* xix 97, 98 (cf. xxv, 167), *C.I.G.* 9258, Heberdey u. Wilhelm, *Reisen in Kilikien*, No. 11, etc. It is probably Christian in origin (Ramsay, *Cities and Bishoprics* II, 495 n. 3), the pagan use being 'a counterblast to Christianity.'

10. Kötlek. Stone in west wall of mosque, with incised Latin cross, of which the shaft divides the first three lines of the inscription: 50 × 48 cm. Broken below.

^νΕνθα κατά|κίτε ὁ δοῦ|λος τοῦ| [Θ](εο)ῦ ὁ θεο||φιλέστατος
(or - σεβέστατος) - - -

In the W. wall of the mosque at Kötlek I copied the epitaph published by G. Perrot, *Galatie et Bithynie*, p. 293 No. 149, as found at Nefez-Keui: the stone (69 × 47 cm.) is broken below, and the inscription is surmounted by a Greek cross in a circle. Perrot's copy reads Ἀνάπαν|σις Θημισ|τίου ἔν|γονος (sic)| Γρηγορί|ου. In ll. 5, 6 my copy reads Γριγορί|ου δο - - i.e., δο[μεστίκου] or, possibly, δο[ύλου τοῦ Θεοῦ].

11. Buyuk Nefez Keui. In cemetery to S. of village: 47 × 46 cm. Much weathered. Letter forms, A with broken bar, E M Π Σ W; frequent ligatures.

- - ον | - - -

- - (ε)μόνα τα.

. . ος - Λ - ὑπατον

(π)ρεσβευτήν [Σ]εβασ(τοῦ or - τῶν)

5

ἀντιστράτηγον

Συρίας τῆς Παλαισ-

τείνης, τὸν ἑαυτῶν

εὐεργέτην.

The latter part of an inscription in honour of a Roman imperial governor (*legatus Aug. pro praetore*) of Palestine, containing an account of his previous career. In l. 2 we should probably read [ήγ]εμόνα (for this title see Dittenb. *O.G.I.* 561, note 4): the next letter is uncertain. In l. 4 (ἀ)[νθ]ύπατον is possible, but we should expect this word to be followed by the name of a province. For the government of Palestine as a separate Imperial province see Dittenb. *O.G.I.* 601 note 4, Mommsen et Marquardt, *Manuel des Antiquités Romaines*, IX, 368 ff. An inscription from Ancyra (*C.I.G.* 4029) runs thus: Γ. Ἰούλιον Γ(αῖου) υἱόν, Φαβία, Σεουήρον - - - ὑπατον, πρεσβ(ευτήν) ἀντιστράτηγον Συρίας Παλαιστείνης, Τρέβιος Κοκκήϊος Αλέξανδρος τὸν ἑαυτοῦ εὐεργέτην.

12. Buyuk Nefez Keui. Stone in wall of house west of the mosque: ca. 80 × 90 cm. Broken on right and below.

Ἐνθα | κατά|κιτε | ὁ δοῦ||λος τ[οῦ]| Θ(εο)ῦ ᾿Τ|πατί|ου.

The last word is doubtful: possibly a letter is lost at the end of l. 6 or l. 7: if the reading of the text be accepted, we must suppose that the engraver wrote ᾿Τπατίου in error for ᾿Τπάτιος, perhaps misled by the immediately preceding genitives.

13. Buyuk Nefez Keui. Stone in projecting wall of house E.S.E. from the mosque: 99 × 67 cm. Between ll. 2 and 3 is a hole 7 cm. square by 3 cm. deep.

† Ἐνθα | κατὰ|κιτε ὁ δοῦ|λος τοῦ Θ(εο)ῦ||Χαρῖνος.

The form of the X is noteworthy (+): it may be influenced by the † at the beginning of the inscription.

14. Buyuk Nefez Keui. Stone in cemetery $\frac{1}{4}$ mile S.W. of the village: 76 × 32 cm. Above the inscription is a Greek cross in a circle.

Ἐνθα | κατὰ|κιτε | ὁ δοῦλος || τοῦ Θ(εο)ῦ | Ἰωάννη[ς]||
δομέσ|τικός.

For δομέστικός see Du Cange, *Gloss. med. et in. Graecitatis*, s.v. and cf. *Bull. Corr. Hell.* iii, 343, xxv, 335, and Waddington, *Voyage arch. en Asie Mineure* No. 1185, ἔνθα κα|τάκιτε | ὁ δοῦ|λος τοῦ || Θ(εο)ῦ ὁ λαμ|πρ(ότατος) δομ|έστικός | Ἰωάννη[ς].

15. Buyuk Nefez Keui. Stone in N. side of bridge leading to the cemetery, badly weathered: ca. 80 × 45 cm. The shaft of a Latin cross (with ✕ at the base) divides the first two lines, but the head and arms of the cross have disappeared.

Ἐνθα | κατὰ|κιτε ὁ [δ]|οῦλ[ος] Θε||οῦ Στ|τέφαν|νος.

Sterrett (*Epigraphical Journey in Asia Minor*, No. 368) publishes a very similar text from the same place: Ἐνθα | κατὰ|κιτε | ὁ δοῦ||λος| τοῦ Θ(εο)ῦ | Στ(έ)|φανος.

16. Buyuk Nefez Keui. Badly weathered stone in the W. (outside) wall of the Odah, broken on left and below. Round the inscription runs a raised margin, and the lettering was divided by a cross, of which only the upper part remains.

Ἐνθα κ[α]|τάκιτε| ὁ δοῦλος τοῦ Θ(εο)ῦ | Ἐ(λ)πί(δ)ι(ο)[ς δ]| πο(τ)(ε)
[πρ]εσβύ|τε||ρος - - -

The proposed restoration is uncertain: my copy of ll. 3, 4 shows

ΕΔΠΙ ΛΙ'
ΠΟ~C ECBY

Possibly Ἐ(λ)πί(δ)ι(ς) should be read as in No. 5 (above).

17. Buyuk Nefez Keui. Stone in house E. of the mosque.

Ἐνθα κα|τάκιτε | ἡ δούλη | τοῦ Θ(εο)ῦ || Κοσ - - |νη.

The letters KOC in l. 5 are followed by a number of strokes, apparently meaningless. Possibly the name should be restored Κοσ[ταντι]νη i.e. Κωνσταντίνη.

I also copied at Buyuk Nefez Keui four inscriptions already published :

(a) Waddington, *Voyage en Asie Mineure*, 1185. In cemetery $\frac{1}{4}$ mile S.W. of the village, now broken off after l. 6.

(b) Sterrett, *Epigr. Journey in Asia Minor*, No. 362. In S. wall of house near the mosque: above the inscription is a Greek cross in a circle.

(c) *Ibid.* No. 365; Ramsay, *Bull. Corr. Hell.* vii, p. 27, No. 19. Stone in W. wall of house in the S.E. of the village, with raised margin all round: ca. 90×30 cm. Broken at top. The arrangement of the text makes it probable that a space was left for a Latin cross in the latter part of the inscription, but of the cross itself there is no trace.

(d) Sterrett, No. 358; Ramsay, p. 27, No. 20. Stone in house W. of the mosque: 108×70 cm. Above the inscription is a small circle in an acute-angled pediment, with leaves in the side spandrels; below is a wreath in relief. Broken on left. In l. 2 Ramsay reads $\Delta\text{H}\Sigma\text{Σ}\text{T}\text{N}$ $\text{B}\text{I}\text{Q}\text{A}\text{I}$: my copy agrees with Sterrett in giving $\Delta\text{H}\Sigma\text{T}\text{N}\text{B}\text{I}\text{Q}\text{A}\text{I}$.

18. Emirler (a village three miles N. of Boghaz Keui). Stone in stable. Above the inscription, fleur-de-lys in triangle; below, large cross broken off below the the arms.

Μνημα Θεωδόρου.

MNHM are written in ligature.

At Eyuk I copied the inscription (80×30 cm.; in wall of a house) published by Perrot, *Galatie et Bithynie*, p. 349, No. 155.

19. Yuzgat. Stone in garden of Armenian Catholic priest: 60×47 cm. Very badly cut.

Ἐνθα κατ[άκ]ιτ]ε ἡ δούλι τοῦ Θε(ο)ῦ Μ[αρ]ία ΜΗ|

Μαρτίου d ἐνδίκτου| lb ἐτελεῦτισεν.

Probably the letter at the end of l. 2 is intended for N: the word will then be $\mu\nu(\iota)$, i.e. $\mu\eta\nu\iota$. In l. 3 d=6, and ἐνδίκτου is equivalent to ἰνδικτιῶνος (cf. *C.I.G.* 8652, 8731, 9262). In l. 4 lb must stand for lb, i.e. 12. Perhaps we should read M[αρκ]ία or some other name for M[αρ]ία in l. 2, as the vacant space is large enough to have contained three letters.

20. Keller. Stone in wall of house: 47 × 36 cm. The upper part of a gabled stele, broken off below.

Καπίτωνι | τῷ (ύ) - -

21. Keller. Stone in eastern outer wall of the Armenian school: 58 × 41 cm. Broken above.

- - | εων Ἀὐρ(ηλία) Πατρι|κίῳ τῇ ἐαυτῶν | ἀδελφῇ μνή|μης χάρειν.
Possibly the first letter is Γ (= σ). Πατρίκιος is apparently here a feminine name.

22. Keller. Gable-topped stele in *narthex* of the Armenian church: 60 × 34 cm. Complete except for the right-hand upper portion.

ΠΑΡΝΑΚ
Π^ΟΜΑΘ/
ΗCΤΗΓΥΝ
ΛΙΚΙ

The reading of the first letter is doubtful; it might be Ν. In either case, the first two names are puzzles. Φαρνάκης is common, but neither Παρνακ- nor Ναρνακ- is known. The ending, -ης, of the second name is strange, where we should expect a dative with which τῇ γυν|(α)ικί is in apposition. Can the word be [Κ]οματήλ[λ]|ης (cf. No. 25, below)?

In the Konak at Boghazlayan I copied the epitaph published by H. Grégoire (*Bull. Corr. Hell.* xxxiii, p. 55, No. 22) and by R. C. Thomson (*Proc. Soc. Bibl. Arch.* xxxii, 290). It commemorates a bishop, Κυρίκαλος, probably of Euasai (Siva in the Table), which is placed by Ramsay (*Hist. Geography of A. M.*, 304) at Yögcunnes, three hours N. of Boghazlayan. The stone is very large to have been transported so far, but Grégoire was told that it came from a village 'some hours N. of Boghazlayan.'

23. Kaisarieh. Altar-shaped stele with elaborate top, seen in the bazaars: 60 × 20 cm.

Δάφνικος | Ἀπολλῶ | ζῶν ἐαυτῷ | καὶ Ἀρχελα||ίδι
γυναικί | ἰδίᾳ ζώσῃ.

24. Kaisarieh. Altar-shaped stele with elaborately ornamented gable-top, seen in the bazaars: 60 × 20 cm.

Ἀσκληπι|άδης καὶ | Κλαυδία γλυ|κυτάτῳ υ||ίῳ
Κλαυδια|νῷ μνήμης | ἔνεκεν.

25. Kaisarieh. Stone (30 × 25 cm.) seen and copied in the bazaars; broken off at the top and otherwise injured.

- - - |[Τρο]φίμου, Ἀχι[λλ]εί|ου φύσει, θέσει[ι δέ]| Τροφίμου, τῶ
 γλυ|κυτάτῳ ἀδελφῶ || καὶ Κοματίλλῃ τ[ῇ] | γλυκυτάτῃ
 θυγα[τρὶ] | μου (μν)ήμης χ[α̃]|ρην.

The second word appears as AXIMEI|OY, but this does not give us any known name and should probably be altered as is above suggested.

26. Chok Geuz Keupreu. *Graffiti* in red on the overhanging face of a cliff, 150 feet above the river Halys, on the left (south) bank, 2½ miles below the bridge. Near the *graffiti* were rock cuttings, including a flight of steps leading up to the remains of a cave, probably that of a hermit.

|ω ἅγιος ΜΕ|CΘ . . . σωζε ↑ |παχ ↑ > ω|

In l. 1 we recognize ὁ ἅγιος, and in l. 2 σωζε. Another *graffito* consisted of 7 lines, of which the last four were illegible: ll. 1-3 ran

ΓΝΟΘΙ
 ΝΩΤΙΑΕΜ
 ΓΜΡΤΕΑ

L. 1 [συν]νῶθι? L. 3 ἀμ(α)ρτ(ωλ)- - ?

In the Konak at Nigdeh I copied the upper part of a limestone stele, published by H. Grégoire (*Bull. Corr. Hell.* xxxiii, 131, No. 110).

At Bor I saw and copied the following inscriptions:

- (a) Rott, *Kleinasiatische Denkmäler*, No. 80; more correctly in Grégoire, *Bull. Corr. Hell.* xxxiii, 142, No. 113.
- (b) Rott, 81; Grégoire, p. 145, No. 117 *bis*.
- (c) Rott, 82; Grégoire, p. 143, No. 114 (corrected reading).
- (d) Rott, 83; my copy seems to show that on the stone there was no room for the word ἀνδρί restored by Weber (*ap.* Rott).
- (e) Rott, 84; Grégoire, p. 143, No. 115 (corrected reading).

At Kizli-Hissar (ΤΥΛΑΝΑ) I copied and photographed the marble slab (75 × 51 cm.) now used as the top step of a flight of stairs in a house in the N.E. of the village; the centre and the top right-hand corner are badly worn and the edges are much weathered. The text is published in Rott. *op. cit.* No. 78. In the house of Mehemet Koros

Bau Han Malesi I saw the two fragments of a Latin epitaph published by Grégoire, *Bull. Corr. Hell.*, xxxiii, p. 146, No. 120: my copy shows PATER at the end of fragment b. l. 1 instead of PATRI, as read by Grégoire.

Outside a café, near the railway station at Adana, stands the altar-shaped stone published *Bull. Corr. Hell.*, vii, 325 ff., 'Ελλ. φιλολογ. Σύλλογος, xv, 1884, p. 51, *Μουσείου καὶ Βιβλιοθήκη*, v, 1884/5, p. 73, and *Inscr. Graec. ad res Rom. pert.* iii. 883. Dimensions, 152 × 71 × 56 cm.

27. Missis (MOPSUESTIA). Carefully cut stone in a small excavation to the E. of the village: 67 × 53 cm. Letter forms, ΑΕΖΘΩΞΠCΩ.

Τὴν ὁμόνοιαν| Μοψεατῶν καὶ Ἀνα|ζαρβέων Κλαυδιανὸς| Κύρου, θέσ[ε]ι δὲ Θανμάστου,|| τὴν ἐξ ὑποσχέσεως.

For the history of Anazarbos (or Anazarba) see Hirschfeld *ap.* Pauly-Wissowa, *Realencyclopädie*, s.v. For the long rivalry between Anazarbos and Mopsuestia see *Journ. of Philology*, xi, 157.

The remaining stones which I copied at Missis were these:

(a) Cylindrical stone in the courtyard of a house in the middle of the village: 70 × 48 cm. Published by L. Jalabert, *Mélanges de la Faculté Orientale, Beyrouth*, III, p. 477, No. 72.

(b) Stone in cemetery E. of village: 86 × 52 cm. Broken above the first line, with a rope-moulding down each side. Waddington, *Voyage en A.M.*, 1506. Davis (*Asiatic Turkey*, p. 68) reproduces the stone without notes, and reads τὸ πᾶν in l. 1 instead of ΤΟΠΕΝ. Ramsay (*Cities and Bishoprics*, II, p. 488) quotes from Le Blant (*Inscr. chrét. de Gaule*, II, p. 152 f.) τόπος as a local characteristic of the Christian tombs at Mopsuestia. In l. 4 I read ΝΟΥΚΡΗ.

(c) Stone on bridge, altar-shaped, cylindrical: 107 × 55 cm. Published *C.I.G.* 4439, Waddington, *Voyage en A.M.* 1492, *I.G. ad res Rom. pert.* III, 917. Cf. *J.H.S.* xviii, 314, 315.

28. Hürü Pegamber (ΚΥΡΡΗΥΣ). Stone stele on E. side of citadel hill: 114 × 59 cm. The inscription is engraved on a *tabul aansata*, with festoon above and panelled door below.

Ἀλε(ξ)ί[μ]ακου

ΜΑΡΙΟΥΙC C C C

Α Α ΟC

The letters in l. 3 are much smaller than those in ll. 1, 2.

29. Hürü Pegamber. Stone built into the wall of the dede, above the door.

+ Βιλλισαρίου στρατ(η)λάτου (Δ)υσινίκη +

On the stone A is written, probably by an error of the engraver, as the first letter of the third word. With the use of *στρατηλάτου* here cf. J. R. S. Sterrett, *Wolfe Expedition to Asia Minor*, Nos. 629, 630 (from Diarbekir) Θεοδώρου τοῦ στρατηλάτου πολλὰ τὰ ἔτη.

On the same site I copied the following inscriptions :

(a) On a sarcophagus to the W. of the city. Waddington, 1829 (from Pococke), *Bull. Corr. Hell.* xxvi, p. 186, No. 30.

(b) Altar-shaped stone on E. side of citadel hill : 185 × 56 cms. *Bull. Corr. Hell.* xxvi, p. 185, *I.G. ad res Rom. pert.* III, 1004.

(c) From E. side of citadel hill. *Bull. Corr. Hell.* xxxiii, p. 186, No. 33.

(d) Stone in E. wall of the dede, on the W. of the tower. *Bull. Corr. Hell.* xxvi, p. 186, No. 31.

(e) Stone built into main wall of the acropolis, near the door : 30 × 20 cm. Waddington, 1831. At the end of l. 3 I read ΘΕΟΥ.

30. Asar. Black stone at foot of the tell near the village.

Δὲ Μεγίστ(ω) | Αὐρήλιος | βουλευ[τῆς καὶ Εὐ(?)]|νοια
γυνή [αὐτοῦ - -]|- νοι ἐποίη[σαν - -] | - ρος ἔτους ΒΛ - - |
Σεουήρο(υ) - - - | ΔΕΘΙΟΥΑΚΛ - -

SECOND INTERIM REPORT ON THE EXCAVATIONS AT MEROË IN ETHIOPIA

PART I—EXCAVATIONS

BY PROFESSOR JOHN GARSTANG, M.A.

A preliminary note on the work of our first expedition to Meroë in the Sudan appeared in the *Annals of Archaeology*, Vol. III, pp. 57 to 70, with Plates 20 to 23. A full report for that year, in which the Rev. Professor A. H. Sayce and Mr. F. L. Griffith also collaborated, has been since published by the Clarendon Press under the title '*Meroë—the City of the Ethiopians.*'

It will be recalled that during that first season's work the positions of the Temple of Amon and of some of the important buildings of the city were ascertained, the Temple of Amon was excavated in outline to secure a general plan, and a remarkable Solar Temple discovered in the desert about a kilometre eastward from the city was also uncovered. Lying between the Sun Temple and the site of the city was an extensive necropolis, which was examined in some detail. It proved to be in three main divisions, representative probably of three different periods.

The discoveries in general proved of so great interest that the Committee had no hesitation in continuing the excavation, and the names of the gentlemen who supported this new expedition included the following:—Ralph Brocklebank, Esq., Freiherr von Bissing (Munich), Monsieur Jean Capart (Musées Royaux, Bruxelles), H. Martyn Kennard, Esq., Rev. W. Macgregor, M.A., Robert Mond, Esq., Major E. Rhodes, Dr. Waldemar Schmidt (Copenhagen), James Smith, Esq., D. J. Vallance (Royal Scottish Museums), and H. S. Wellcome, Esq. Each of these gentlemen subscribed £100. During the progress of the season's work Mr. Mond subscribed a further sum of the same amount, while Mr. Henry S. Wellcome increased his contribution to the generous total of £500. The party of workers included, as usual, Mr. Horst Schliephack as Chief Assistant, and was joined by Mr. Robin Horsfall, who volunteered his services. Professor Sayce stayed the

greater part of the season in camp and devoted his keen insight and unbounded energy to the work. Major E. Rhodes, D.S.O., a member of the Committee, stayed also in the camp and lent his ready assistance whenever desired. Work was begun at the beginning of December, 1910, and was closed down in the middle of February, 1911. Saleh abd el Nebi occupied his usual position as head foreman, and under his charge forty of our trained Arabs came from their homes in Egypt to take part in the work. These were employed chiefly as working overseers, each overlooking a gang of native labourers, of whom some three to five hundred were more or less constantly employed.

One of the first pieces of work was to continue the clearance of the great Temple of Amon, which in the course of a few weeks was entirely laid bare (Plate VIII). In the Sun Temple, also, a considerable amount on the south side of the wall of the temple was cleared away, disclosing a number of secondary buildings (Plate VII), and the whole of the structure was similarly left clear of débris. The main feature of the season's work was concerned, however, with the discovery and examination of a walled enclosure lying to the west of the Temple of Amon; this proved to be of the nature of a royal citadel, enclosing two large palaces and other buildings of official character. Plate VI shows the position of the various groups of buildings which have now been examined, and a comparison of this with the map of the site of excavations, 1910 (*Meroë*, Plate II), will show the development of the site on the western side of the railway during the past season. Included in the outlying buildings recently examined, are No. 622 (on the north of the plan), apparently a private residence, with No. 621, a bath, slightly to the south; some extensive pottery kilns (No. 620); various mounds (Nos. 285, 286, 710, 711, 712), containing instructive remains of workshops and other buildings; and lastly the great palace (No. 750), which was cleared in outline (Plate X) but not completely excavated. Not much work was done on the eastern side of the railway. The excavation of one building (No. 70, Plate XI) was, however, rewarded with results of special importance in tracing the development of the site, while another building of special character (No. 255 also on Plate XI) was found lying beyond the Sun Temple to the south-east.

The Temple of Amon (No. 260 Plate VIII)

This building was completely excavated; previously the chambers around the sanctuary alone had been cleared, but in this season's work Chambers 272, 278 and 277 were found to form a part of the main building. The two first were unimportant except that in No. 272 there was found, just at the foundation level, a remarkable cameo of Greek workmanship, representing a pair of galloping horses, the one black and the other white, its date may be approximately fixed at 300 B.C. In the same chamber there was found a small tablet of stone decorated with low reliefs, representing the king and the queen making offerings to the Ram-headed Amon and the goddess Isis. Below were several lines of inscription in Meroitic cursive character. It is unfortunate that this object (now in the museum at Khartoum) was much broken, as it is a characteristic specimen of Ethiopian art. In the Chamber 277 there were evidences of a colonnade, and at its western extremity a small shrine enclosed within a screen of columns. In the main avenue, in the centre of Chamber 270, there was found, in the paved floor of the building, a place specially prepared for sacrifice of larger animals; it was about three metres square, surrounded by a trench and enclosing a central space about one metre square in which had stood a dish of stone lined with glazed tiles. In the outer hall (No. 271) the base of an obelisk of black granite was found *in situ* just to the left hand of the entrance to Chamber 270. This obelisk must have been originally about three or four metres in height above its plinth; the upper part of it, however, was broken entirely away, so that only about half a metre of the inscribed faces remain. The inscription is in lines of Meroitic cursive script, clearly engraved and supplemented by numerous fragments found scattered around, and constitutes one of the longest Ethiopian texts hitherto discovered. To the south of the central sanctuary (No. 279) there was found against the main wall of the hall a stone dais, approached by several steps, and carved in a single piece. It is decorated around the outside with a design of bound prisoners, while upon the steps themselves are similar representations of humble captives upon which anyone mounting the dais must place his feet.

The Temple of the Sun (No. 250, Plate VII)

The general plan of this building as previously published (*Meroë*, Plate 28) is confirmed. A number of subsidiary chambers were found against the southern wall and these are represented in the new plan. On this side, from the west, there may be seen also an ascending ramp, leading up, doubtless, to a door in the southern wall of the building. On the same side, to the east, there came to light a small chamber enclosed between the main wall and the colonnade. In the floor of this were numerous vases of earthenware filled with incinerated bones and charcoal, a proportion of the bones were apparently human. Just above, upon the outer face of the main wall, there are scenes representing the slaughter of young men and boys, while among the sculptures which decorate the walls (some of them now falling away from their original places) there may be recognised scenes of torture. Of special interest is a group of decorative carvings upon the west wall of the main building supplemented by fragments, which give a contemporary picture of the whole temple as it originally stood. The wall of the inmost sanctuary may be seen rising above the colonnade which represents the cloister upon the main platform: both the inner and outer pylon are also quite distinct. Another part of the scene represents a four-columned building, apparently that of which the ruins are traceable just to the east of the enclosure wall of this temple. The sloping way leads up to this building, and a number of figures included in the decorative scheme are arranged in two groups similar to one another, in which a bound captive may be seen being dragged up the slope by a cord attached to his leg, while a soldier from behind compels him to mount with the point of his spear. The representations of the king seated upon his throne, and of warriors mounted on galloping horses, complete these interesting scenes.

The royal city (Plate IX)

The great wall against which the Temple of Amon abuts is that which is visible above the ground. Early in the season we traced out the foundations of the wall which lie as indicated in the plan, enclosing an area about 300 metres long, and more than

150 metres in width. The western wall seems to have fronted the river, in antiquity. The arrangement of quay walls and break-water will receive further attention during the coming season. In the enclosure itself, the royal palace (No. 294) and the building which adjoins it (No. 295) were completely excavated. These buildings, as represented in the plans, are doubtless of a date much subsequent to the original construction of the city; in fact, at various points the traces of older buildings were found in the deeper levels. In the building, No. 294, there were made two or three discoveries of a special character; in the first place, at the northern side, a deep rubbish pit was found containing innumerable fragments of faience, pottery, and miscellaneous objects. The objects of faience included numerous sistrums, *ankh*-signs and rings, all inscribed. Upon the rings there was in general only the wish for a happy new year expressed in Egyptian hieroglyphs, but the objects in the two former classes disclosed a number of royal names and historical information which is dealt with fully by Professor Sayce in the second portion of this Report. This rubbish pit clearly belonged to the earlier building, for the dated remains are of the 8th to 6th century B.C., while the upper building is probably not earlier than the beginning of the Christian era. Just outside the northern wall of the palace there lay numerous building stones; also at a low level there was found a doorway with its original lintels and threshold in place, inscribed in a similar fashion. These are further indications of the original palace. The last discovery was equally important from a historical point of view and more remarkable. In digging down in the centre of the building, the flooring of a deep stone-lined chamber was come upon at a depth of four metres from the surface, below the foundations of any of the extant walls. This seems to have been a sort of treasure chamber, but it was entirely empty. Hard by, however, under the foundations of a wall there was found a pottery vase of red polished earthenware, somewhat resembling a type known in Egypt in the late XIIth and the early XVIIIth dynasties. This was filled with gold dust and nuggets, broken glass and beads, together with three inscribed jewels of gold in the form of a pyramid, a scarab, a flat scarab-seal and three gold money-rings. The jewels of gold were pyramidal in form though not tapering

to an apex. They are inscribed in Egyptian hieroglyphs and bear the name of two kings, Uaz-ka-Ra (Hor-matleq) and Mal-neqen. These, from the association of other inscriptions, are known to belong to the period of Aspalut, the builder of the Solar Temple, and their date, as Professor Sayce shows, must be the 8th or 7th century B.C. Subsequently, another jar of similar character, filled also with gold dust and nuggets was discovered near at hand, but unhappily in this find there was no further historical information.

In the other palatial building, No. 295, the traces of an earlier structure were much more apparent, but it is still doubtful whether the lower building which was traced out to some extent, really belongs to the early period of the remains just described. This building was distinguished from the other in that there was a bath lined with stone blocks. It was as deep as the height of a man, and a flight of steps led down one side to the bottom. Before passing from these palaces there may be noticed also the discovery in No. 294 of a hoard of bronze objects, which seem to have been inlaid, as well as numerous fragments of pottery which, from their position, may lead to some chronological data. There was also found near the surface a fragment of a large scarab of Amon-hotep III mentioning Queen Tii, the two cartouches being fortunately preserved. Though broken, the discovery of this object of the XVIIIth dynasty has none the less considerable significance.

We dealt only briefly with the other building lying northward from these palaces. No. 296 was traced downwards to its level, some five metres below the surface. Four columns had supported its roof and two doors were still traceable in its western and eastern walls respectively. Between that and the building, No. 292, there was found a deposit of alabaster, presumably corresponding in date to the XXVIth dynasty of Egypt, as well as the bronze fittings of a royal throne, which had doubtless been made of wood and had subsequently decayed. These included a lion-shaped foot, a moulded knob and several rings of bronze, and also a remarkable image of a bound prisoner, whose ankles are tied to his elbows behind his back, an attitude familiar upon Ethiopian scenes. A gold wire is wound around his neck, suggesting that this prisoner

was attached to another, as on the mural decorations. Possibly this object formed an ornament on the royal footstool. The chamber, No. 292, was of greater interest, the walls marked in the plan are at a considerably higher level than those just described, and below the building there is also a floor level of stone which probably corresponds to the floor level of No. 296 and to the dated jewel and inscriptions of the palace, No. 294. The structure, however, has this special interest in that its interior walls are covered with stucco and decorated in barbaric fashion with gorgeous colours. The scenes represent the king and queen of Ethiopia, their officials and, may be, their allies, as well as a number of bound captives of foreign race. Detailed drawings have been made by Mr. Schliephack of these instructive representations, which it is hoped to publish with the fuller report of these discoveries. In the centre of this building there rose up a secondary structure which had doubtless formed the pedestal of a statue or group. The columns of the original building had been cut down, with their capitals lowered and re-used, probably to support the canopy over the statue. Unfortunately, the destruction of time had proceeded too far for anything of the statue to be traceable *in situ*, though the plinth of the pedestal is evident. Just outside the doorway of this chamber, and buried in a clean pocket of sand ($2\frac{1}{2}$ metres from the surface) there was a Roman bronze portrait head of heroic size. This is shown from three points of view in Plates XII-XIV and is fully treated by Professor Bosanquet in Part III of this Report. The area to the immediate east of this building is still covered by a large mound, which we propose to excavate during the coming season.

Other buildings of the site.

We do not in this Interim Report enter into detailed description of any of the other buildings excavated, though all of them contribute important details to our increasing sum of information concerning this remarkable buried city. Two of them, however, should be specially noticed. The small shrine, No. 70, shown in Plate XI, is a typical example of a small Meroitic temple as illustrated in the previous season's work upon the Lion Temple, No. 6, to which it is adjacent. It is decorated with various scenes,

and amongst animals represented there may be noticed a herd of cows who wear cow-bells attached to their necks. The altar was found *in situ* with a stone ramp at one side. Of special interest, also, is the fact that the building stood on a small mound of artificial character as was the case with the Lion Temple excavated the previous year. In investigating the nature of this mound, we came below the foundations of the temple to the outline of a house or workshop of earlier date. A fact observed in the case of the Lion Temple also. It now seems clear that this mound had accumulated from the workshops and buildings of the old indigenous population of iron smelters. The slag and refuse of their occupation covers these mounds in remarkable profusion. Subsequently the temples were built upon the same spots, possibly because of traditions which lingered in connection with them. The other building is that, No. 750 (Plate X), which we have as yet only disclosed in outline, with the exception of a single chamber which was excavated experimentally. In this there were found the remains of three statues of remarkable character and instructive examples of Meroitic sculpture. The one seems to represent a dancing girl, while the head of another is clearly that of a negro. In spite of considerable lack of technical skill there is to be seen in these objects evidence of special qualities of realism and character which lent to them a special importance. The building itself will be completely excavated during the coming season.

PART II—THE HISTORICAL RESULTS

BY THE REV. PROFESSOR A. H. SAYCE, D.LITT.

The historical results of the second season of Professor Garstang's excavations at Meroë have much exceeded expectation. Little additional light has been thrown upon the later history of the Ethiopian kingdom, but, in return, its earlier history has been in great measure revealed to us. We have come to learn what an important place it occupied in the oriental world of the ninth and eighth centuries before our era, and how largely it affected Egyptian history. The obscurity which enveloped the history of Egypt between the age of Osorkon II and the Assyrian conquest has been to a considerable extent dissipated. Egypt was once a subject province of Ethiopia; Memphis and Thebes were the seats of rulers who held office at the pleasure of the King of Meroë, and it was with the Kings of Ethiopia that the Kings of Judah were allied. The negro troops of the Sudan beat back the Assyrian invaders of Palestine, and saved Jerusalem in the days of Hezekiah.

The history of the Sudan begins in the neolithic age. Stone celts, accompanied by black pottery with incised patterns, are found both at Meroë and elsewhere north of the Blue Nile. I have picked them up at Basa, some seventeen miles eastward of Meroë, at Kawa, south-east of Dongola, at Kerma, and other sites. They have been discovered at Gebel Geili, between Naga and the Blue Nile, together with the characteristic black incised pottery which belongs to the neolithic age. In most places where they are met with a Meroitic town subsequently sprang up.

The Meroitic civilisation seems to have been imposed from outside upon a native neolithic population. At Kerma, neolithic graves are intermingled with graves which contain pottery and alabaster vases of Twelfth Dynasty form, but belonging to the Meroitic period. The same fact results from an examination of the city-mounds at Kawa. But it is not only in the Sudan that I have observed the fact; it holds good also of Upper Egypt. My excavations in the Twelfth Dynasty cemetery at Ed-Dêr, opposite Esna, showed that the Twelfth Dynasty tombs were intermingled

with graves which contained the same incised black pottery as that of the Sudan, together with black-topped vases of the so-called 'Pan-grave' type. At El-Kab, the long-continued excavations of Mr. Somers Clarke and myself brought the same fact to light. Here we found a city which was built in the time of the First Dynasty, and reached the height of its prosperity in the time of the Third Dynasty, after which it appears to have been practically deserted, until it was again partly occupied in the age of the Tenth and Twelfth Dynasties. After that period it was once more deserted until the Roman Age, with the exception of a settlement of the priests in the immediate neighbourhood of the temples in the age of the Eighteenth and Nineteenth Dynasties. But above the ruined houses of the Third Dynasty lay stone celts and fragments of black pottery with the same incised patterns as those found at Ed-Dêr and in the Sudan. At Hierakonpolis, also, opposite El-Kab, which was deserted after the fall of the Old Empire, and only partially occupied again for a while under the Twelfth Dynasty, similar pottery has been discovered.

The black-topped pottery of the 'Pan-graves' has now been traced to Nubia, and it is to the Sudan that the incised black pottery must also be referred. In the troublous age which followed the decay of the Old Empire, Sudanese tribes must have made their way into Upper Egypt, bringing with them the products of their neolithic culture. To this day the district between El-Kab and Esna is inhabited by the Ababda, and it is to their Hamitic forefathers that I would ascribe the neolithic remains met with here and in the Sudan.

The conquests of the Twelfth Dynasty introduced Egyptian culture into the districts south of the First and Second Cataracts, and the influence of this culture lasted down to the commencement of what I would call the Meroitic period. Except at Kawa, I found no pottery of the Eighteenth Dynasty type south of Sesebi, although blue fayence ornaments of the time of Amon-hotep III were discovered in a grave at Atbara, when the foundations of the railway workshop were being sunk, and two rams of Amon-hotep II, carved out of native Sudanese sandstone, were disinterred by Lepsius at Wad Ben-Naga. A few objects of the time of Amon-hotep III, including part of a 'marriage-scarab,' were found in

one of the chambers of the palace at Meroë, which was certainly built long after the age to which they belong. They may therefore have been brought as spoil from Egypt, but the broken condition of the scarab, and the fact that it was one of those which were sent to distant parts of the Egyptian empire, make it more probable that they had been found in the ground by the builders of the palace. However this may be, no pottery of Eighteenth Dynasty type has been met with at Meroë, whereas the vases in which the gold tribute was found are of distinctively Twelfth Dynasty character.*

Along with the absence of New Empire pottery goes a remarkable scarcity of bronze objects. Bronze objects were indeed discovered in graves of the Roman epoch at the western group of pyramids, and they were also met with in the palace among the relics of a time when Egypt was a dependency of the Sudan and Egyptian influence was all-powerful at Meroë. But apart from this, bronze is remarkably rare; its place was taken by iron, of the working of which there is abundant evidence. Mountains of iron-slag enclose the city-mounds on their northern and eastern sides, and excavation has brought to light the furnaces in which the iron was smelted and fashioned into tools and weapons. Meroë, in fact, must have been the Birmingham of ancient Africa; the smoke of its iron-smelting furnaces must have been continually going up to heaven, and the whole of northern Africa might have been supplied by it with implements of iron. Where the Egyptians used copper or bronze, the Ethiopians used iron. There was no copper or bronze age, apparently, in the Sudan; its inhabitants passed from the age of stone into that of iron.

Elsewhere in the Sudan, at Kerma, at Kawa, and in the island of Argo, I have found heaps of iron-slag, mixed with the clay crucibles in which the metal was fused, adjoining the ruins of a Meroitic temple. In most cases there was also a mound of burnt bones which appear to have been used in the manufacture of the enamelled tiles and other objects of fayence. It is a curious fact that the dynastic conquerors of Egypt, 'the followers of Horus,' were, according to Egyptian tradition, iron-smiths and not copper-

* Dr. MacIver and Mr. Woolley point out that the pyramids of the Ethiopian princes are traceable to the small brick pyramids erected in front of the twelfth dynasty tombs they have discovered at Wadi Halfa (*Karanog* p. 14).

smiths, and that each successive victory they gained over the older population of the country was marked by the erection of a *mesen*, or iron-forge. These forges became the sanctuaries of the later Egypt, and to the last that of Edfu continued to be known as the *mesen*. That the Egyptians were sporadically acquainted with iron, even in the pre-dynastic period, has been proved by the recent discovery by Professor Flinders Petrie of iron beads in a prehistoric cemetery in the Fayyûm.*

The builders of the palace at Meroë appear to have ascribed the foundation of their city to the Egyptian conqueror Amon-em-hat I. At all events, on one of the stones from the palace is what seems to be the name of that king. That he was believed to have been the founder of Napata, the earlier capital of the Sudan, may be inferred from an inscription from Gebel Barkal, built into the walls of the mediaeval fortress at Old Merawi, which mentions 'the city of the house of Amon-em-hat,' and a scarab found at Meroë, and now in the Khartum Museum, bears the name of the same king. It was the occupation of the Sudan by the sovereigns of the Twelfth Dynasty that may have brought the Sudanese into Upper Egypt with their stone celts and incised ware.

The history of Meroë, like that of the other cities of Ethiopia, goes back to the neolithic age. So far as our knowledge extends at present, it did not become the seat of civilisation or government until the ninth century B.C. Before that period, Napata, under the shadow of Gebel Barkal, had been the capital of the Sudan. Here, it would seem, had been the headquarters of the 'Princes of Kush,' who ruled Ethiopia in the name of the Pharaoh in the age of the Eighteenth and two succeeding dynasties, as well as of the priestly Ramesides from Thebes, who had found a refuge in the Sudan after the rise of the Twenty-second Dynasty, and had established there an independent sovereignty.† There was more than one reason for giving the preference to Meroë. It was in the fertile 'island' between the Atbara and the Blue Nile; it was at

* See my article on the 'Iron-workers of the Sudan' in the *Proceedings of the Society of Biblical Archaeology*, March 1911.

† This is the usual view. But it is just as possible that one of the 'Princes of Kush' made himself independent and founded an Ethiopian dynasty. The last Prince of whom we hear was Piankhi, the son of Her-Hor at the beginning of the 21st dynasty. His predecessor had been Pa-Nehsi, 'the Negro,' the Phinehas of the Old Testament.

the end of the trade-route which led from the Red Sea, across the Atbara, to the Nile; rich deposits of iron-ore lay close to it, and a little to the north were the sandstone cliffs from which the stones of its buildings could be quarried. And the white ants soon made it clear that, however suitable crude brick might be for building purposes in Egypt, it could not be used in the Sudan.

There were at least three palaces at Meroë, one of which has now been completely excavated. This is the south-western palace (No. 294) immediately to the west of the temple of Amon. The palace to the north of this has been only partially explored. Possibly it was the older of the two; if so, it was restored and to a large extent rebuilt in a late age.

The excavation of the south-western palace has yielded results of considerable historical importance. It, too, has been destroyed and rebuilt at least once. Its palmy days belong to the age of Aspalut or Aspalto, when it was the seat of the most powerful dynasty that, so far as we know, ever reigned over Ethiopia. The inscriptions on its broken columns and walls of stone, as well as on the objects of fayence found in one of its chambers have enabled us to recover a forgotten chapter of history. Its builder was Mal-neqen, whose name is also written Mal-neq. The Egyptian determinative *nefer* 'good' is always attached to the syllable Mal, and since on the Stela of Aspalut, now in Cairo, the determinatives of 'marching' are attached to the second element in the name of Mal-biwa we must conclude that *mal* signifies 'good' in the language of Ethiopia. If Mal-biwa meant 'good at marching,' Mal-neqen would have meant 'good' at something similar.

Mal-neqen entitles himself 'king of Upper and Lower Egypt,' 'the Son of the Sun,' 'eternally living,' 'the good god,' 'the lord of the two lands,' 'beloved of Harmachis,' 'of Bast,' and 'of Hathor of An (Dendera) the regent of the gods.' He is thus not only king of both Upper and Lower Egypt, but is also under the special protection of their presiding deities. On the other hand, unlike his successors, he has no prenomen; as 'Son of the Sun' and 'king of Upper and Lower Egypt', he is alike known only by his Ethiopian name.

We may infer from this that he was the first of the Ethiopian kings who was master of Egypt as well as of Ethiopia. That the

faience objects found in the palace were made by Egyptian artisans admits of little doubt. The inscriptions upon them and the forms of the hieroglyphs alone would make this pretty certain. So, too, would the beautiful scarab which was in the same vase as some of the gold, and which would appear to have been manufactured in northern Egypt expressly for the Ethiopian king. On one of the stone fragments from the palace a deity, whose name is lost, is made to say: 'I have given thee the north and the south.'

The palace was enlarged by Aspalut or Aspalto, who took the prenomén of Mer-ka-Ra. Aspalut was the builder of the Sun-temple which was dedicated to Uben-Ra, 'the shining sun of morning,' of whom the king says in his stela that 'praised is his name Uben,' when he 'rise(s) from [the horizon],' 'marching in the sky,' 'eternally'. The high altar of the temple and the stairway that led to it were accordingly made to face east, where the sun rose each morning from the edge of the desert, immediately to the south of a range of hills. It is probable that an ivory plaque discovered by Layard at Nimroud, the ancient Calah, which represents a seated king on either side of Uben-Ra in a cartouche, came from the Sudan, like the seal of Sabako, discovered at Nineveh.

It was not only the rising sun, however, that was worshipped by Aspalut: he was also 'the beloved of Nefer-Tum,' the setting sun, and it is possible that the little chapel to the setting sun on the quay-wall at the western extremity of the city was built by him. As was natural, he further calls himself 'the beloved of Harmachis,' the risen Sun-god, who was personified by the Sphinx of Giza; he adored Amon only as Amon-Ra, 'Amon the Sun-god.' On a block from the part of the palace constructed by him, mention is made of Isis, and on another block, which also seems to belong to him, we find the name of Aten-Ra, the Solar Disk. Aten-Ra, however, is already commemorated in an inscription from the original building of Mal-neqen.

Whether Aspalut was the immediate successor of Mal-neqen is doubtful. Another king, Hor-matleq, more probably intervened between them, though it is also possible that the succession was in the inverse order, Hor-matleq being the successor of Aspalut. But

the pyramids of the gold tribute carry the names only of Mal-neqen and Hor-matleq; the gold pyramid of Mal-neqen, however, is a good deal worn as compared with those of Hor-matleq, so some interval of time may have elapsed between the manufacture of them. Hor-matleq assumed the prenomen of Uaz-ka-Ra, and, unlike Aspalut, was 'the beloved of Amon' as well as a worshipper of Amon-Ra. The name of Hor-matleq is practically new, for though it was found by Lepsius at Gebel Barkal, the first character in it was misread and the last was lost.

The names of other kings belonging to the dynasty of Mal-neqen have been brought to light by the inscriptions on the objects of fayence found in the palace, more especially the handles of the sistra which were presented by the queens to the kings on a New Year's Day.

The dynasty was Ethiopian, like the dynasty of Sabako; that is plain from the names. Its capital was Meroë, not Napata, but its kings claimed rule over the whole of Egypt, and their workmen must have been brought to a large extent from that country. What is the date to which the dynasty must be assigned?

Hitherto Aspalut has been supposed to have been a successor of Tanut-Amon, and consequently to have lived towards the close of the seventh century B.C., when the Twenty-sixth Dynasty was ruling in Egypt, and all Ethiopian authority was at an end. This we now know could not have been the case. Mal-neqen and his successors, who were lords of Egypt as well as of Ethiopia, must have lived before the rise of the Twenty-sixth Egyptian Dynasty, and the Persian conquest which followed it.

On the other hand, they did not belong to the Twenty-fifth Dynasty of Ethiopians, with whose names we are acquainted. There remains, therefore, only the period before the Twenty-fifth Dynasty to which they can be referred. In other words, the period of internal confusion and anarchy which preceded the accession of Sabako and began about B.C. 800 must have been that when Mal-neqen and his successors controlled the valley of the Nile. Naturally the Egyptian annals are discreetly silent on the subject, but it is now clear that the later kings of the Twenty-second Dynasty, along with the kings of the Twenty-third and Twenty-fourth, were merely kinglets who ruled in the Delta at the pleasure

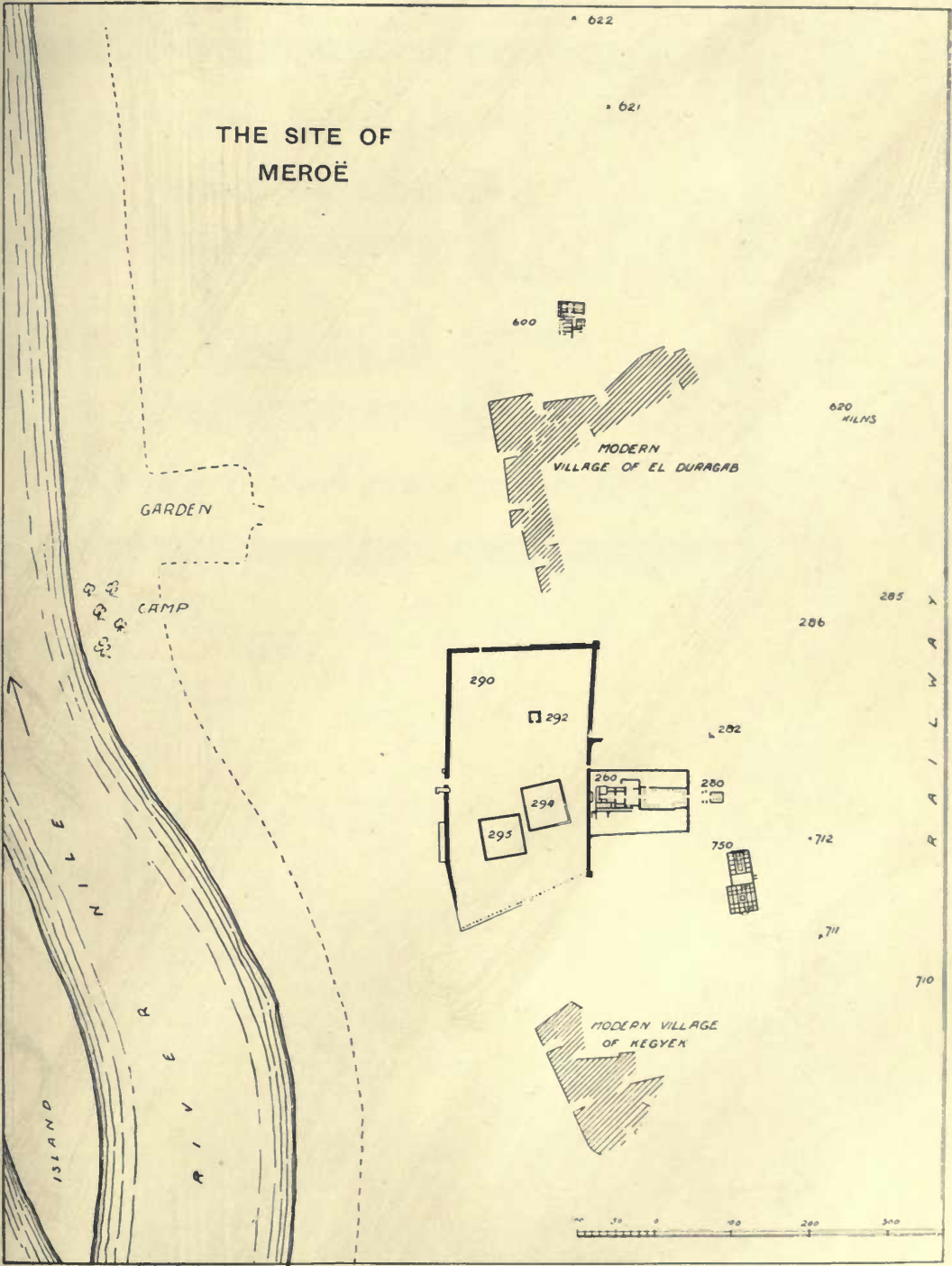
of their lord, the Ethiopian King. Memphis and Thebes were only the capitals of provinces governed by the satraps of the King of Meroë.

The campaign of Piankhi Meri-Amon against Egypt now becomes intelligible. It was undertaken simply to suppress a rebellion among his Egyptian subjects. Hence it was that most of the Egyptian cities opened their gates to him, and that he offered sacrifices at Memphis and Heliopolis as the legitimate Pharaoh of northern Egypt. The names he assumed—User-mat-Ra Meri-Amon Si-Bast—were those that had been borne by the Pharaohs of the Twenty-second Dynasty (Osorkon II, Sheshenq III, and Pami), and they were also borne by his own vassal, the native prince of Tel-el-Yahudiya. The name Piankhi itself reminded his subjects of Piankhi the son of the High Priest Herhor, the last 'Prince of Kush' of whom we hear.

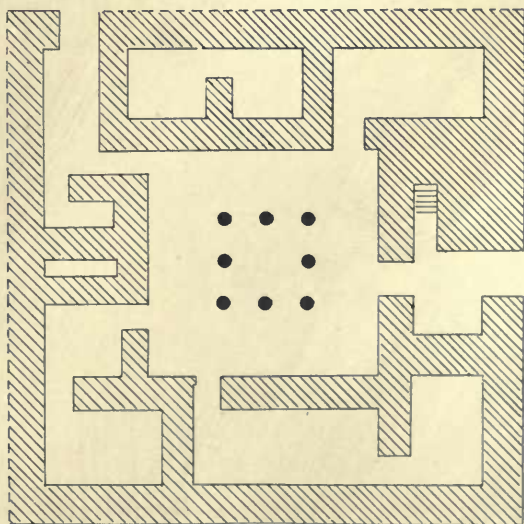
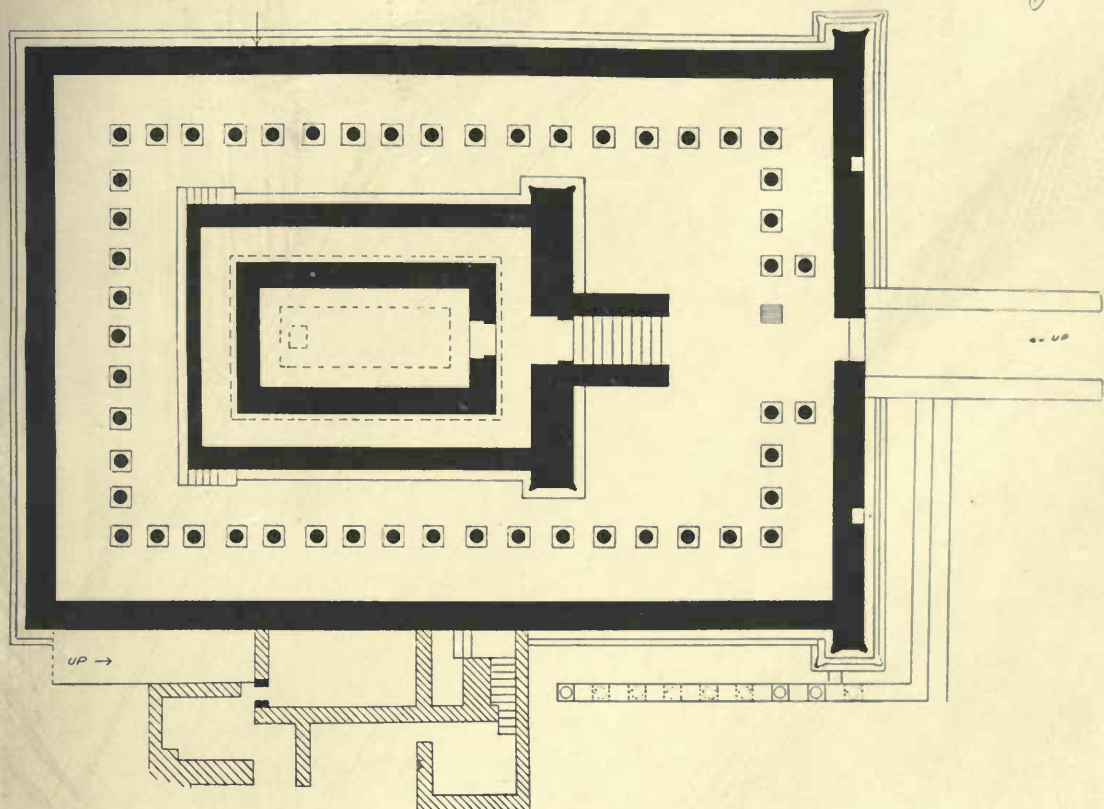
Piankhi did not belong to the dynasty of Mal-neqen, though, so far as the possession of Egypt was concerned, he entered into the fruit of their labours. He was a worshipper of Amon, and his capital was at Napata, not Meroë. His date is fixed by the fact that Osorkon III of the Twenty-third Dynasty was his vassal. Professor Flinders Petrie is doubtless right in making him the immediate predecessor of Kashto, 'the Kushite,' who was succeeded by Sabako. The monuments of more than one later Piankhi have been found at Gebel Barkal and elsewhere; one of them was the father of Taharqa.

The Egyptian campaign of Piankhi occurred in his twenty-first year, and we may follow Professor Flinders Petrie in placing the commencement of his reign about B.C. 748. The Mal-neqen dynasty will therefore have occupied the throne before this date, and the transference of the capital of Ethiopia from Meroë to Napata will have already occurred. Considering the number of royal names belonging to the dynasty of Mal-neqen with which the excavations at Meroë have made us acquainted, I do not think we should be far wrong in placing the Ethiopian conquest of Egypt shortly after the death of Osorkon II, about B.C. 850. Osorkon II was the last king of the Twenty-second Dynasty whose monuments show any sign that he was more than a mere kinglet. At the same time a semblance of power must have been left to his successors,

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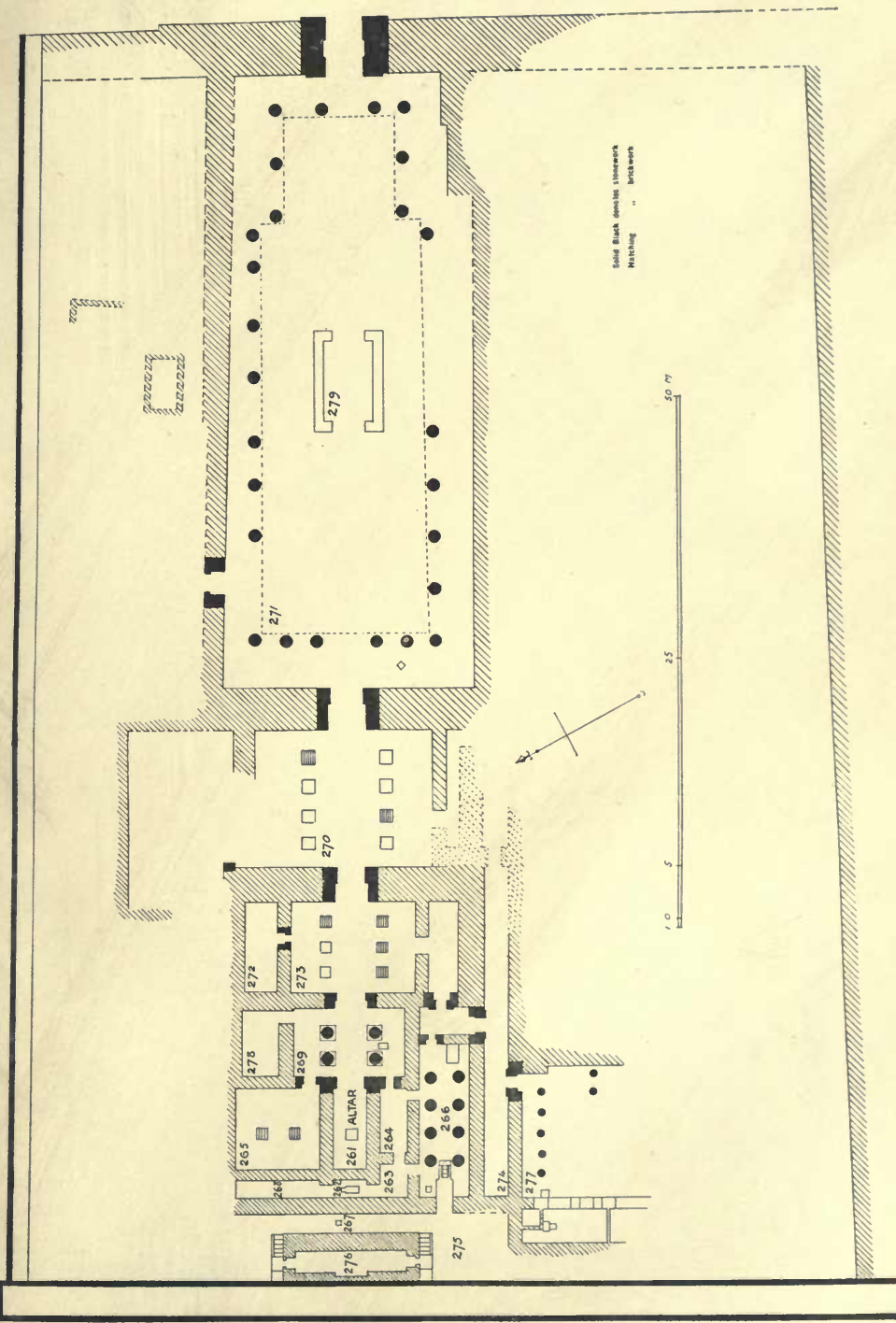


MEROË: THE SITE OF THE CITY AFTER TWO SEASONS' EXCAVATIONS.



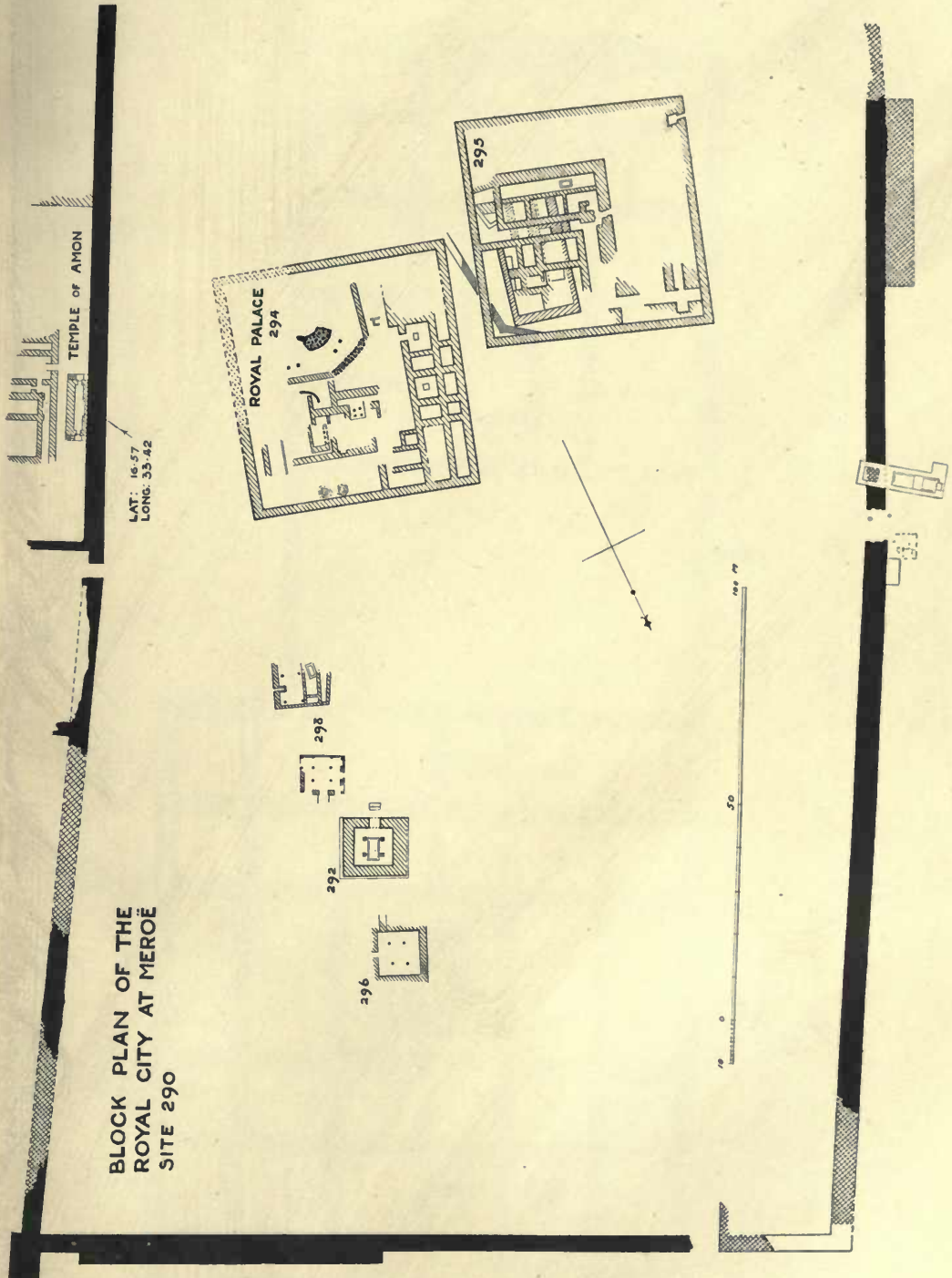
MEROË: THE SUN TEMPLE AND ADJACENT PRIESTS' HOUSE. No. 250.

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MEROË: THE TEMPLE OF ANON AT COMPLETION OF EXCAVATION. No. 260.

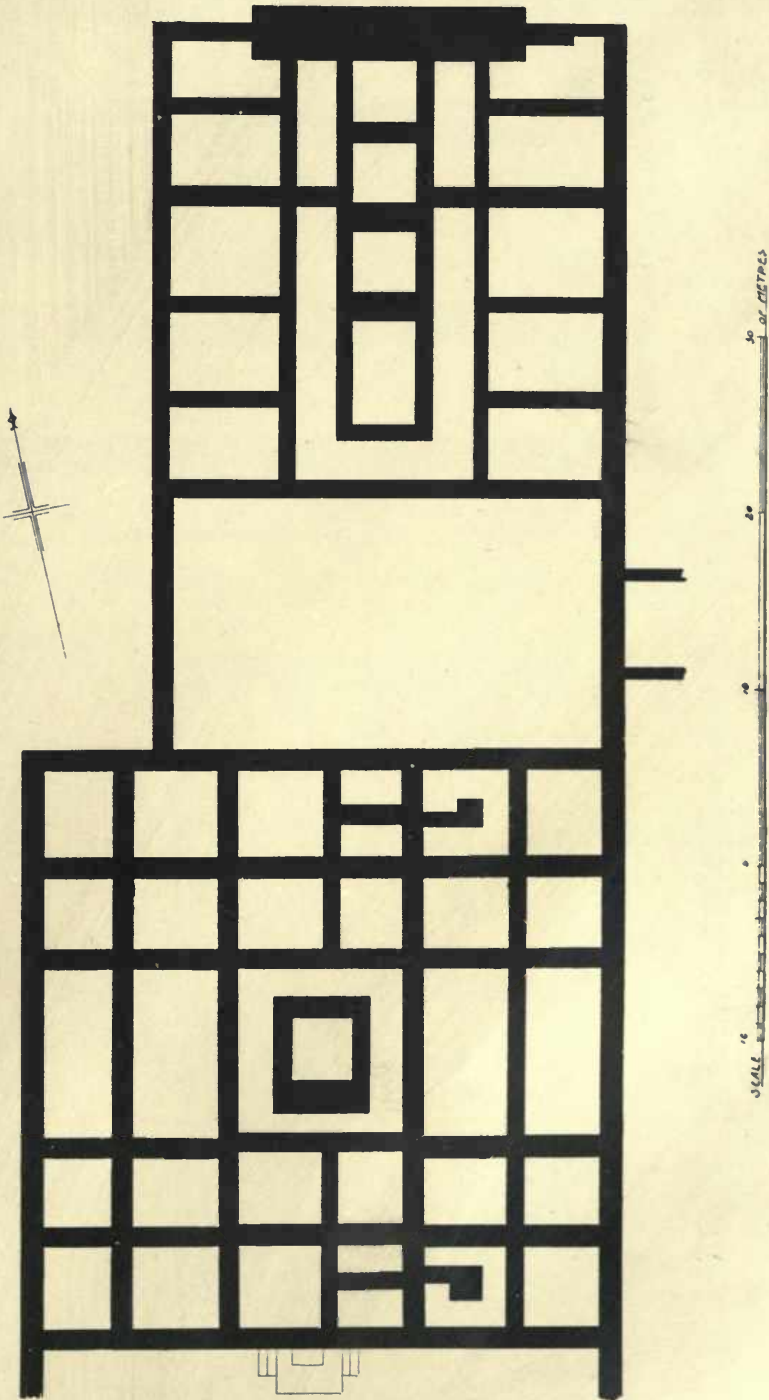
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BLOCK PLAN OF THE
ROYAL CITY AT MEROË
SITE 290

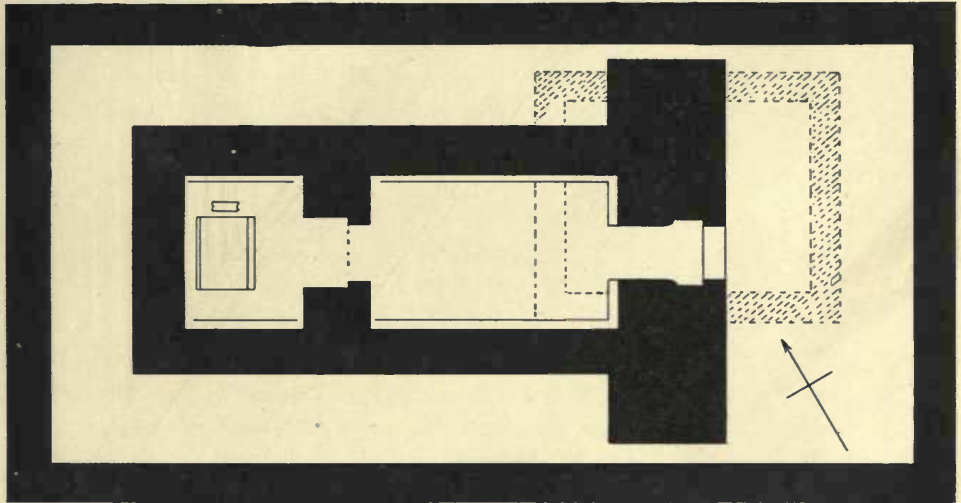
MEROË: BLOCK PLAN OF THE ROYAL CITY OR PALACE ENCLOSURE. No. 200.

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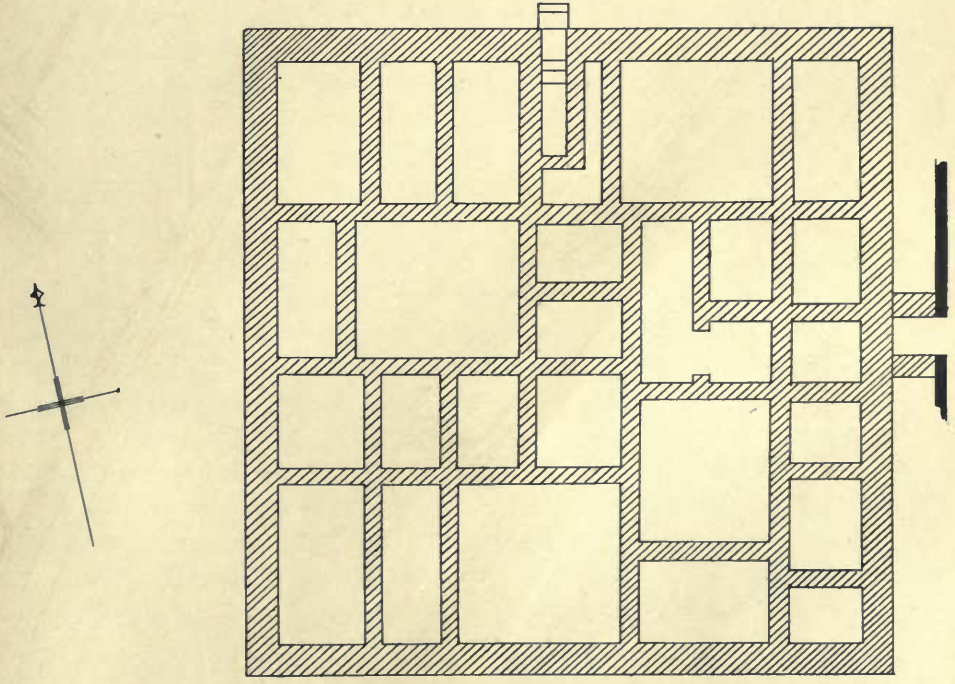


MEROË; GREAT PALACE NEAR THE AMONTEMPLE; NOT YET EXCAVATED. No. 750.

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MEROË: SHRINE COVERING SITE OF ANCIENT WORKSHOP. No. 70.



MEROË: ISOLATED BUILDING S.E. OF THE SUN TEMPLE. No. 255.

since the records of the Nile levels on the quay at Karnak are dated in the regnal years of some of them, proving that they were still recognised by the priesthood in Upper Egypt.

Mal-neqen and his descendants were worshippers of the Sun-god rather than of the ram-headed Amon, who looms so largely in the later history of Meroë. On the so-called 'Excommunication Stela,' found at Gebel Barkal, Aspalut describes how he 'went in state to the temple of his father Amon of Napata, residing in the Holy Mountain, that he might expel that sect hateful to God which they call, "Do not cook, let violence kill." ' Sir Gaston Maspero suggests that the reference here is to eating raw meat; at any rate, it describes the expulsion of the priests of Amon from the temple in which they served. And while thus reforming the worship and conception of Amon at Napata, the king was occupied in raising temples to the Sun-god in his own capital, Meroë. What is still more noticeable is that in the royal palace itself a chapel was erected in honour of Aten-Ra, the god of the 'Heretic King' of Egyptian history. With this goes the fact that a later king, Nastosen, tells us that Aspalut had showered gifts upon the temple of Qem-Aton, the Sudanese capital of the 'Heretic King,' the site of which has been discovered by Professor Breasted at Sesebi. It is difficult not to see in this a declaration of the belief that he was the representative and restorer of the cult which Akhen-Aton had endeavoured to force upon his Egyptian subjects. It is significant that when Nastosen recovered the treasure from the wild tribes of Medit who had robbed it he gave it back, not to Aton-Ra but to 'Amon of Per-Qem-Aton.'

At Meroë itself the influence of the solar cult was long and strongly felt. Excavation has failed to discover there any remains of an early temple of Amon; the great temple of Amon seems to belong throughout to the later history of the city. On the other hand, the first deity the traveller and trader from the interior was called upon to adore was Uben-Ra. His temple, with the great reservoir of water beside it, was the last stage in the journey from the east. A gentle slope, along which a motor could easily be driven, leads to Basa, with another great reservoir, and a temple which also seems to have been dedicated to the Sun. In the chapels of the royal pyramids, sometimes the solar disk,

sometimes the solar bark, is sculptured over the false door which led into the tomb; and the doors of the palace, as was natural, were surmounted by the image of the winged disk. The king, as in Egypt, was always 'the son of the Sun,' sometimes, indeed, the Sun himself; he was never the son of Amon, or the ram by which Amon was symbolised.

Eventually, however, the priests of Amon prevailed. The name of Aspalut was erased from the 'Excommunication Stela,' though the monument itself, like those of Akhen-Aton in Egypt, was allowed to remain; his stela at the Sun-temple was broken into fragments; Nastosen, the conqueror of Kambyeses, was elected to the throne by the priests of 'Amon of Baruat' or Meroë; and a time came when the King of Ethiopia, we are told, had to slay himself at their bidding. The Sun-worshippers of the dynasty of Meroë had to give place to the Amon-worshippers of the dynasty of Napata.

But there could have been no such antagonism between them as there was between the followers of the 'Heretic King' and their opponents in Egypt. The monuments of Aspalut were found at Gebel Barkal, along with those of Piankhi and Hor-si-atef, in the ruins of the temple of Amon, if we may believe the story of the natives who sent them to Cairo. And there is no reason for not doing so; the temple was restored by Piankhi, and according to Egyptian custom, he would have carefully preserved the historical monuments of his royal predecessors.

The conquest of Egypt brought the Ethiopians to the frontiers of Judah. Ethiopia and Judah became allies, with the result that when Judah was threatened with destruction by the Assyrians, Taharqa marched to its defence, and at the battle of Eltekeh his Sudanese soldiers saved Jerusalem and the Jewish monarch from Sennacherib. Isaiah shows himself well acquainted with the southernmost regions of the Sudan, 'beyond the rivers' of Abyssinia; his description of the region of the Sudd is so exact that it could have been derived only from an eye-witness. It is possible that this acquaintance with the Kingdom of Meroë may have begun at an earlier age even than that of Mal-neqen; if Zerah, 'the Ethiopian,' who invaded Palestine in the time of Asa (2 Chr., xiv), is not to be identified with the Egyptian Osorkon I,

the Delta would already have been under Ethiopian control about 895 B.C.

The great wall or *enceinte* which surrounds the south-western palace and the quarter of the city in which it stood, belongs to a much later period, at all events in its present form. On the blocks of stone of which it is composed I have found quarry marks, and at the back of the temple of Amon, where it is well preserved, there are, besides the quarry marks, the ligatured Greek letters HP, deeply cut and well formed. In some cases the letters are upside down or turned upon their side, proving that they must have been engraved before the stones were laid in position, and in one case they are preceded by the accentual sign of the rough breathing '^{h} . As the accentual signs were invented by Aristophanes of Byzantium, the erection of the wall cannot be earlier than the reign of Ptolemy IV (Philopator) with which the forms of the letters would agree. It would be the time when Ergamenes emancipated the kingdom from its bondage to the priests of Amon, as Professor Mahaffy has shown, and brought Greek artists and workmen to Meroë. After his massacre of the priests of Amon, he naturally sought to protect himself from the vengeance of the hierarchy, and the great wall, accordingly, which is built in Greek fashion, separates the palace and royal town from the temple of the god. Its architect would have had the name of Heron, Herophilus, Herakleides, or something similar.

The influence of Greek culture at Meroë from the age of Ergamenes onward is very apparent. Among the priesthood, and consequently in the religious cult, Egyptian influence continued to be predominant up to the end of the monarchy, but at court it was largely superseded by that of Hellenism. In the winter of 1909-10 a fragment of Greek *terra sigillata*—the prototype of 'Samian ware'—which belongs to the second century B.C., was obtained from the mounds; on it, in relief, are the letters $\text{BA}\Sigma$. . . which probably represent a name like Basileides or Basilis. The naturalistic decoration of the 'biscuit ware' is derived from Ptolemaic models, which again owed their inspiration to Naukratis.

Greek influence was succeeded in its turn by Latin influence. The stamped patterns of the later 'biscuit ware' cannot be earlier

than the second century of our era, and the bronzes and pottery with its Greek and Meroitic inscriptions found in the grave of Valerius—which, it must be remembered, was a secondary interment—are of the Roman type. On the other hand, the bronze lamp found in a ruined pyramid of the western group, which doubtless belonged to the original occupant of the tomb, is Hellenistic in character.

After the partial destruction of Meroë in the first century of our era, the court and priesthood themselves became more and more African. The kings married negresses, and their offspring grew more and more negroid, while the royal power, for that very reason, passed from the hands of the king to those of the queen. The later architecture of the north-western palace, with its painted chamber, is thoroughly barbarous, and the royal race ceases to be depicted with Hamitic features. The sculptures and hieroglyphs of the later pyramids are grotesquely African, the names of the sovereigns are written either in Meroitic letters or not at all, and the mythology and gods of Egypt are a mere tradition, imperfectly understood. When Meroë fell in the fourth century of our era it had practically ceased to be Ethiopian.

The record of its destruction is to be found in the fragmentary Greek inscription which I published in the *Proceedings* of the Society of Biblical Archaeology, June, 1909. As I was out of the reach of libraries at the time, and have since been able to compare it with the Greek inscriptions of the Kings of Axum, I am now better able to supply the lacunae, and therefore once more give it here:—

1. [Ἀειζάνας βασιλεὺς Ἀξω]μειτῶν καὶ Ὀμηρειτῶν
2. [υἱὸς θεοῦ ἀνικτήτου] Ἀρεως ἀντιδικησάντων
3. [. . . κατὰ καιρὸν παρακούσας ἀπὸ τῆς [πολεως] ?
4. . . . ἐν τοῖς β[ασ](?)ιλίοις καὶ ἐξεπέρθησα τὰς ὕ[λας] ?
5. [. . . εἰς τὸ ἱερόν ? τὸ κατα]κλειθὲν παρελθὼν
6. [οἱ] γενναταὶ ἕτερον δέκαρχον
7. σὺν τῷ βασιλεὶ μέχρι τοῦ
8. [. . . τὰ σκεύη ? τὰ] ἅγια εἰς τὰ ἐν τῇ σεκ*
9. [στρ]ατηγοὺς καὶ τέκνα
10. ἦλθον αὐτίκα
11. ἐν ταῖς ὁμαῖς οἰκί[αις αὐτῶν]
12. ἐπίφοροι
13. χάλκεον
14. ων καὶ

* Perhaps κεκλημένη, σ being written by mistake for κ.

1. [Aeizanas, King of the Ax]umites, and Homerites, [of
Raeidan, Kas, etc..].
2. [son of the unconquered God] Arês: [When the people of
Meroë ?] had a dispute [concerning . . .]
3. . . . having only heard [it], from the [city I departed?]. .
4. . . . [I dwelt in the] palaces (?) and ravaged the
[woods?]. . . .
5. . . . after passing [into the sanctuary?] that had been
closed, [I decided that]
6. . . . [the] sheikhs (*γεννηται*) [should elect] another
decurion . . .
7. . . . [who should go] with the king as far as the
[sanctuary?] . . .
8. [and should take the] sacred [vessels] into the [sanctuaries]
in the place called (?) . . .
9. . . . [the] generals and [their?] children [I summoned?]. .
10. . . . they came; forthwith . . .
11. . . . [in their] common households . . .
12. . . . [they were] willing . . .
13. . . . a bronze [tablet?].
- 14.

As Aeizanas was converted to Christianity about A.D. 340, I have followed Littmann rather than D. H. Müller in ascribing the inscription to him. At the time it was made the Axumite king was still a worshipper of Arê. Meroë had been captured and destroyed before Christianity had been introduced into the country; among the numerous graffiti on the ruined walls of the temple of Amon there is nothing Christian, and except perhaps at the 'Kenîsa,' nothing that can be ascribed to a Christian origin has been brought to light. We have to go to the Pyramids and Sun-temple to find the emblems and names of Christianity.

PART III—ON THE BRONZE PORTRAIT-HEAD

BY PROFESSOR R. C. BOSANQUET

WITH PLATES XII—XVI

The discovery at Meroë, 400 miles beyond the Roman frontier, of a bronze portrait-head in the finest style of Roman Imperial art, demands some explanation. The circumstances of the find only explain its good condition. It had been buried, and, as it seemed to the excavator, deliberately buried, in a pocket of clean sand before the entrance to one of the chief buildings within the palace enclosure or Royal City. The building was a great columned hall adorned with frescoes representing 'a king and queen in scenes of ceremonial and triumph.' Within its walls there was found an intrusive structure of later date, 'a massive pedestal, as if for an equestrian statue or group, with its foundations half as high as the original columns.'

About the personage represented there can be no doubt. Before the head reached England, when only a small photograph was available, a distinguished numismatist suggested that it bore some resemblance to the profile of Germanicus on coins, and this view was adopted provisionally by the finder. 'To judge from the profile,' wrote Professor Garstang, in the Guide to his Exhibition of Antiquities from Meroë, 'it is possible that this head represents Germanicus (B.C. 15—A.D. 19), who, during his military career, was stationed at one period in Syria, and is known from the *Annals* of Tacitus to have made a voyage by the Nile to Aswan.' In letters to the *Times* and *Athenaeum* he has since abandoned this view, and given his adherence to those who maintained that the head represented Augustus.

To remove all doubt I have placed side by side (Plates XV and XVI) the Meroë head and that of the marble statue of Augustus found in the villa of the Empress Livia at Prima Porta, near Rome. Both have been photographed from casts in the British Museum by Mr. F. Anderson, under Mr. F. H. Marshall's direction.

The Prima Porta statue is a touchstone by which other portraits of the Emperor may be tried. It is certainly a contemporary

portrait, whereas, of the numerous busts which have survived, many were manufactured a century or two later for those series of Emperors with which it was the fashion to adorn villas and public buildings. More than that, it was a portrait which satisfied those nearest to the person represented, since Livia gave it a place of honour in her palace. It is in all probability a first-hand portrait made by one who had ample opportunities of studying his subject. Augustus is here portrayed as *Imperator* in the act of addressing his troops. His right arm is raised, his left hand held, not the sceptre placed there by the restorer, but more probably a spear. He wears a cuirass of bronze, fitting closely, and enriched with exquisitely modelled figures in relief. The Cupid beside him, riding on the dolphin, reminds the spectator that the Julian house traced its descent from Aphrodite, and that in the eyes of many of his subjects Augustus himself ranked as a god. These statues of Emperors 'in uniform' were numerous. The neck-line of our head suggests that in this case there was a tunic within the wide collar of the cuirass.

It has been held by good authorities that the Prima Porta statue represents Augustus at the age of fifty or more. A study of Plates XV and XVI leaves no doubt that the Meroë head represents the same man in the prime of early manhood; his face is still unlined, his nose less fleshy, his bearing full of serene strength.

Like many portraits of the Emperors, the Meroë head is of heroic size*. The height of the complete figure would be over eight feet; that of the Prima Porta statue, itself slightly larger than life, is 2·06 metres or 6 feet 9 inches. In Roman times larger portraits were not uncommon. Two heads of Augustus and Tiberius found at Veii, and now in the Vatican, measure a foot from hair to chin; and in the courtyard of the Vatican, known as the Giardino della Pigna, there is a monstrous and much restored head of marble, possibly representing Augustus, the face of which measures no less than 1·20 metres, or 4 feet.

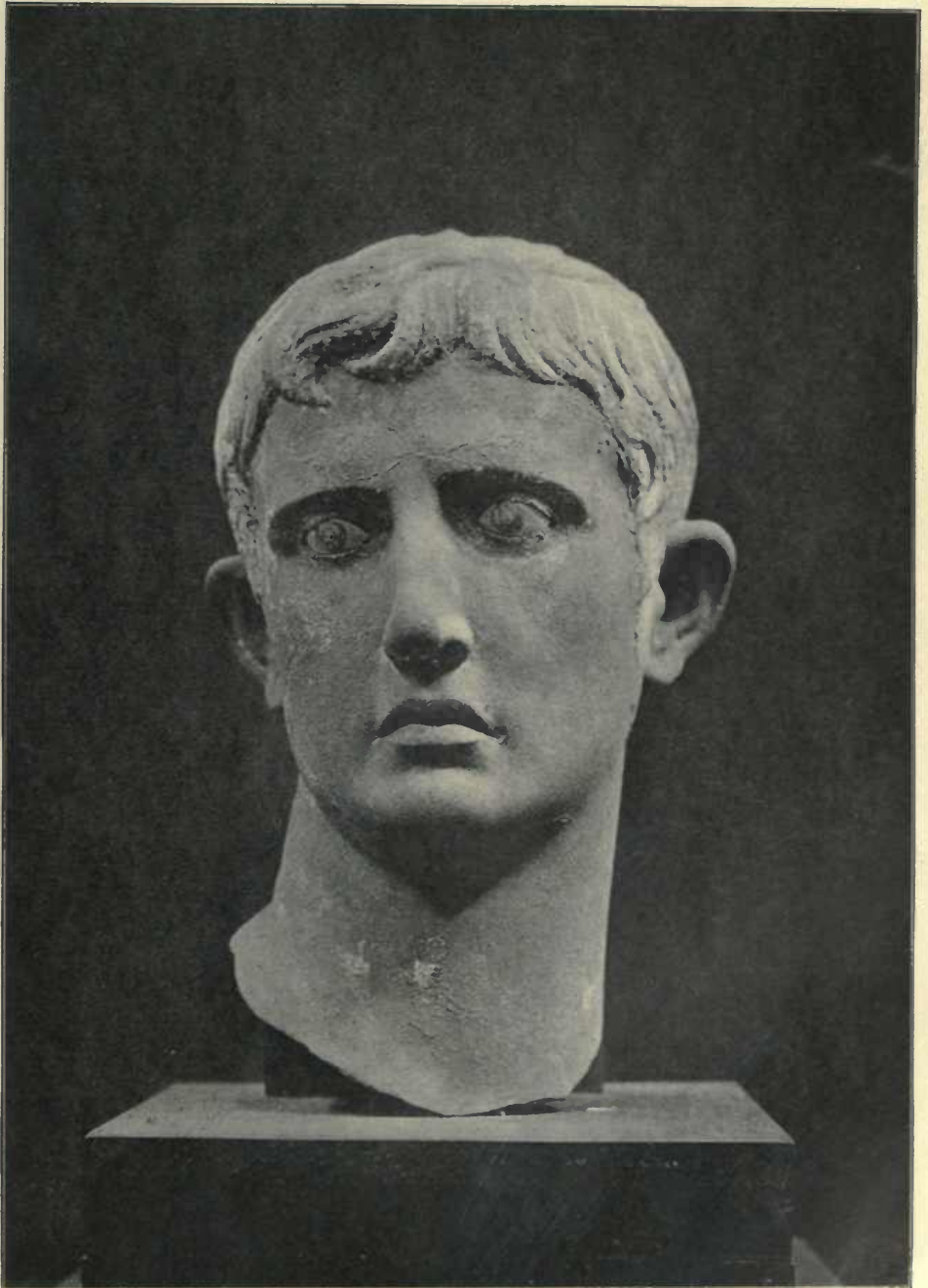
* Mr. Arthur H. Smith has kindly furnished the chief dimensions of the Meroë head in millimetres:—

Crown of head to base of neck in front	430 mm.
" " angle of throat and chin	323 "
" " point of chin	296 "
Point of chin to top of forehead	215 "
Top of forehead to crown of head	81 "

It is interesting to compare our head with the description of the Emperor given by Suetonius in his biography: 'He was singularly handsome and kept his good looks throughout his life. However, he was careless in his dress and took little pains about the arrangement of his hair, so much so, that in order to save time, he allowed several barbers to trim it at once. At one time he would have his beard cut, at another shaved, and always read or wrote during the process. His expression both in speaking and when silent was calm and serene; his eyes were bright and clear, and he liked it to be thought that they were the homes of some divine power; it delighted him when those upon whom he gazed lowered their eyes as though dazzled by the sun. His teeth were wide apart, small and much decayed; his hair, somewhat curly and light brown in colour; his eyebrows met; his ears were of medium size; his nose high and drooping at the tip; his complexion neither swarthy nor pale; his stature small, but the good proportions of his limbs disguised his lack of height, and it was only noticed when he stood beside a person taller than himself.' (*Divus Augustus*, 79.)

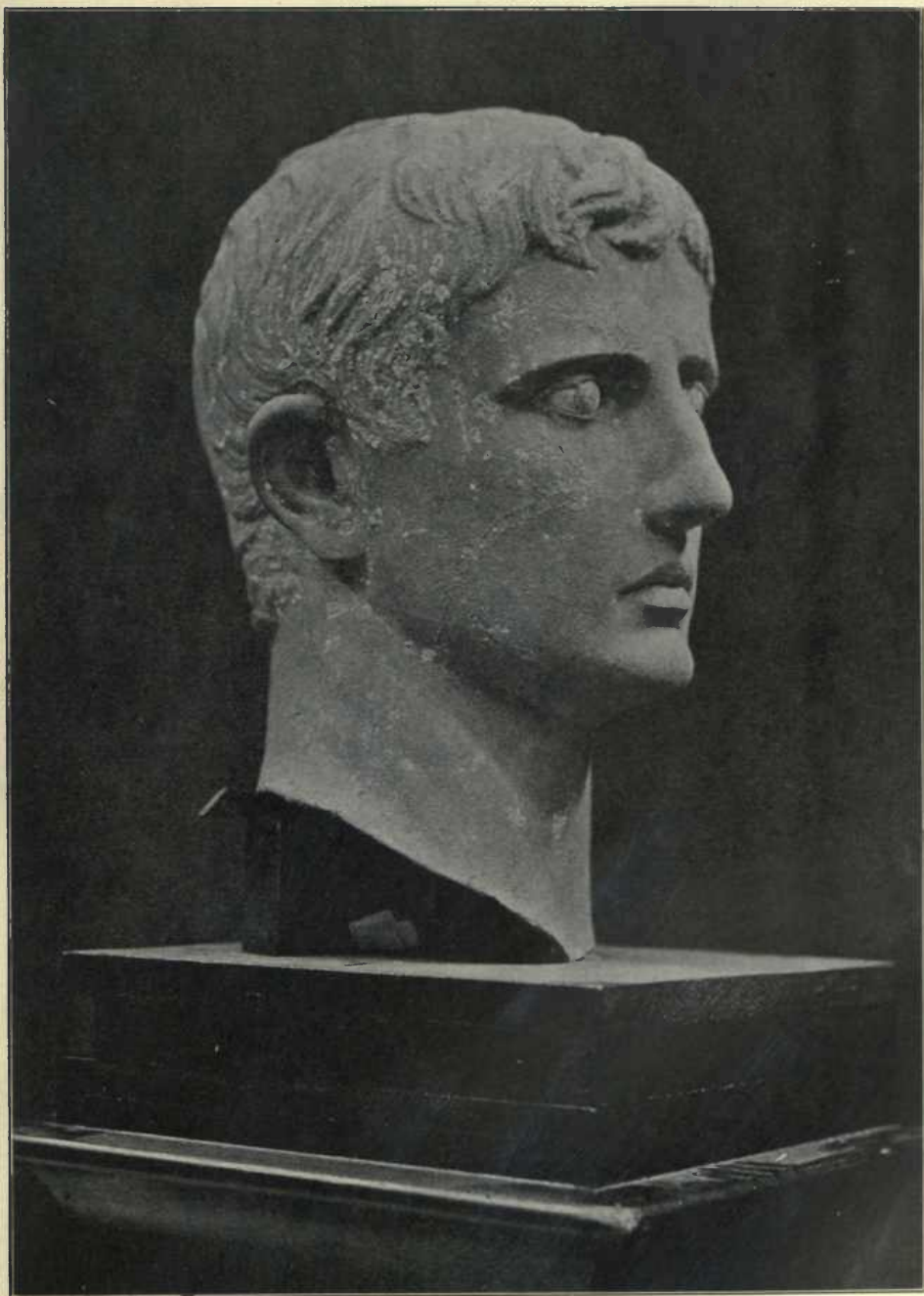
The head from Meroë enables us to realise better than any other extant portrait a characteristic noted both by Suetonius and by Pliny, the piercing brilliance of the Emperor's eyes. Tacitus puts into the mouth of Germanicus (*Annals* I, 42) addressing the mutinous legions at Cologne, an allusion to this quality: 'The divine Julius once quelled an army's mutiny with a single word . . . the divine Augustus cowed the legions who had fought at Actium with a single look (*vultu et aspectu*).' A fourth century writer (the *Epitome* published under the name of Aurelius Victor) describes him as 'corpore toto pulcher sed magis oculis.'

Alone among the extant portraits the Meroë head shows the eyes as the sculptor designed them. As compared with those of the marble heads they are more prominent and less shaded by the upper lids. In the Prima Porta statue the inner angle of the eye is carried somewhat further towards the nose, and the eye is somewhat larger. This is natural. The painted eye of the marble statue could never be so conspicuous as the inlaid eye of the bronze. The pupil is of glass, set in a bronze ring. The material of the iris, partly black, partly yellow, is not easy to determine; Mr. Arthur Smith thinks it may be some hard pebble; there are traces



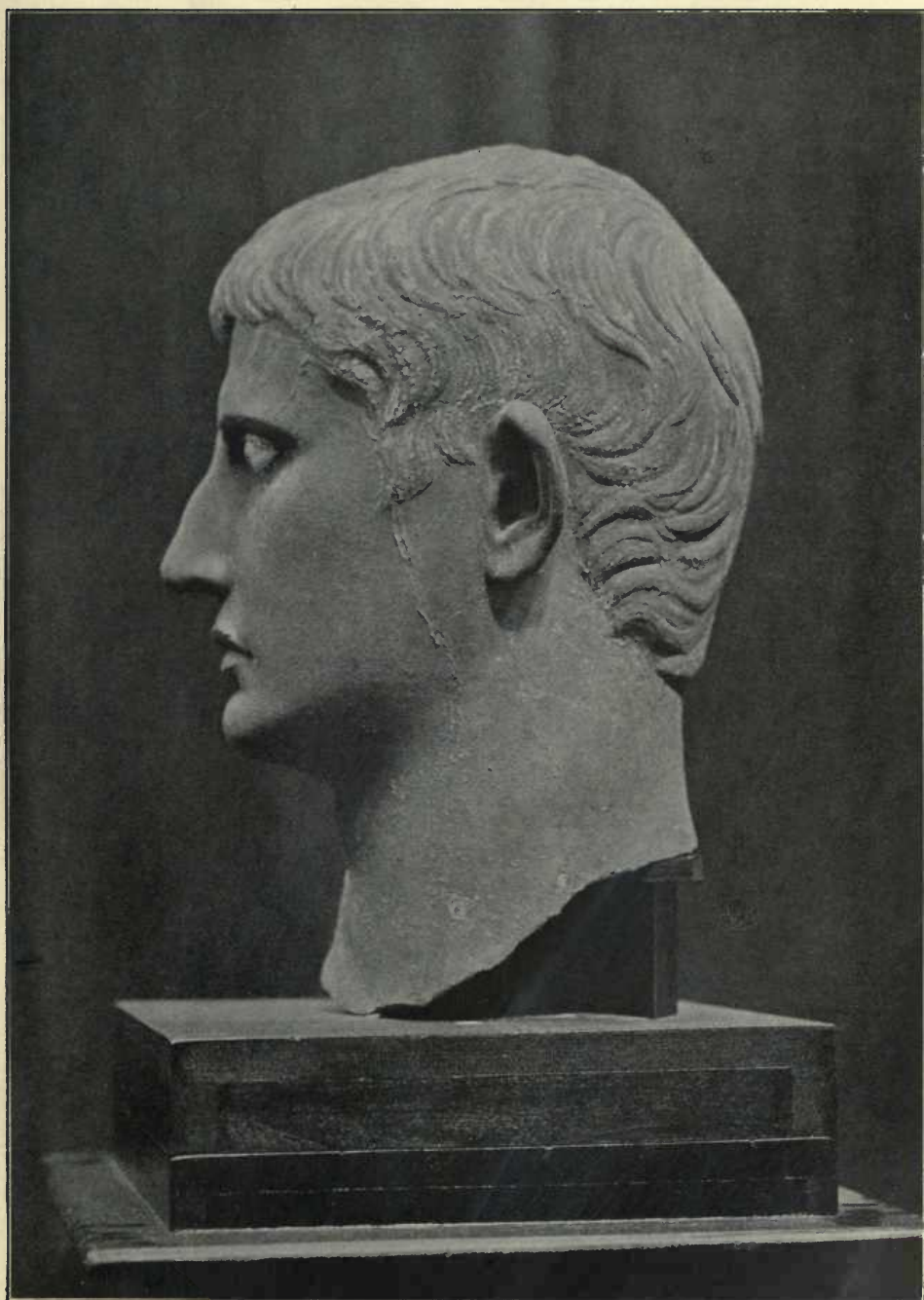
BRONZE HEAD OF AUGUSTUS FROM MEROË.

2
66

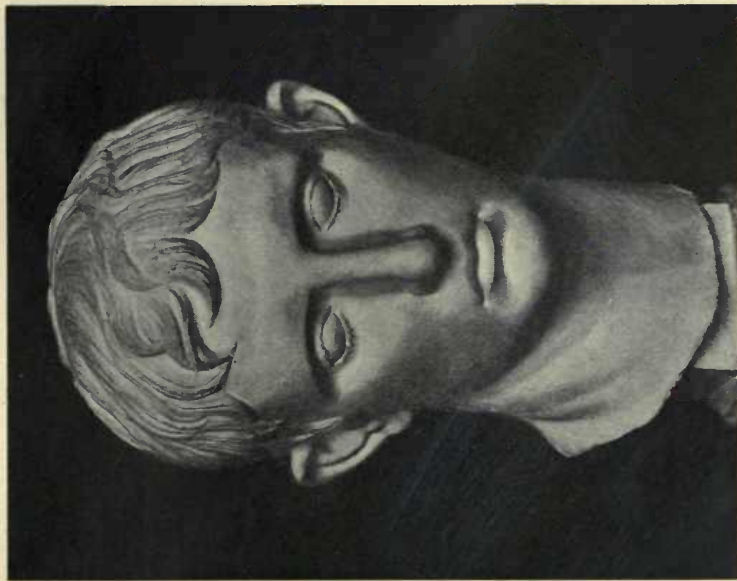


BRONZE HEAD OF AUGUSTUS FROM MEROË.

3
68



BRONZE HEAD OF AUGUSTUS FROM MEROË.



(a) THE BRONZE HEAD FROM MEROË.
(From a Cast).



(b) THE HEAD OF THE PRIMA PORTA STATUE.
(From a Cast).

PORTRAITS OF AUGUSTUS COMPARED.

68 ✓



(a) THE BRONZE HEAD FROM MEROE.
(From a Cast).



(b) THE HEAD OF THE PRIMA PORTA STATUE.
(From a Cast).

PORTRAITS OF AUGUSTUS COMPARED.

68
5
1

of scaling which suggested to Professor Garstang enamel or faience. The whites are of alabaster (or possibly marble, like those of the ephesus found outside Pompeii in 1900), and are contained in a bronze setting. The condition of all these parts is surprisingly good. The eyes are alive, in fact too much so; they glare like a wild beast's. No doubt the bronze eyelashes, which are only preserved in part, did something to screen and soften their expression. Even so we are reminded of Pliny's striking phrase:— 'Augustus had gleaming eyes like those of a horse, the eyeballs very white and of more than common size; and that is why he was offended if anyone gazed steadily at them.' (*N.H.* XI, 143.)

In the formation of the mouth, our head differs from the other portraits of Augustus with which I am familiar. It comes nearest, as might be expected, to the portraits which represent him as a boy. Yet even in them one can detect that drawing in of the corners of the mouth which becomes so marked a trait in the later heads (Plate XV, *b*). Apparently the modeller of our head idealised the lips, making them conform to the conventions of Greek sculpture. The result is no lack of decision; in certain lights the vertical lines at the corners of the mouth give the bronze head a singular expression of stern mastery. One may suspect Greek influence also in the ampler form of the skull; the *Prima Porta* head, doubtless truer to life, is much more brachycephalic. The arrangement of the hair, recalling Polyclitan heads, is common to the whole series of portraits of Augustus. It is curious that sculptors who idealised other features did not modify the spreading ears, so characteristic of Roman men at this period. Comparison of these, as of other features on Plates XV and XVI, suggests that the modeller of the Meroë head, working probably at Athens or Alexandria or elsewhere in the provinces, was content with broad generalisations, whereas the court sculptor was able to make a minutely careful copy from life. The half-idealised presentment was well fitted for its purpose, to bring home to Orientals the strength and beauty of a new Alexander.

We have still to account for the presence of this work of Graeco-Roman art so far outside the Empire.

The Southern frontier of the Roman Empire was generally at

Hierasycaminos, 70 miles south of Assuan (Syene), but it was sometimes pushed 70 miles further south to Premnis, where the ruins of a Roman fort still guard the hill on the east bank of the Nile. The Nubians were restless neighbours, and frequently pressed their raids as far as Syene, and even into Upper Egypt. We hear, in particular, of one raid made in 24 B.C. by Candace, Queen of Ethiopia. Strabo tells (p. 820) how her troops surprised the three cohorts stationed at Syene, capturing that and neighbouring towns and making many prisoners*. 'They even wrenched from their bases (*ἀνέσπασαν* cf. Herodotus, v. 86) the statues of Caesar.' Petronius, however, the Roman Governor, came to the rescue with a small force, drove them back into the Ethiopian city of Pselchis and opened negotiations by demanding the restoration of their plunder and enquiring their reasons for making war. Obtaining no satisfaction, he attacked and won an easy victory over the motley, ill-equipped multitude. He then pushed up the river and reached Napata, the old capital and religious centre of the Ethiopian kingdom, 75 miles south-west of Abu Hammed. Here Candace had a palace, and Petronius was able to open negotiations with her in a neighbouring village. The Queen proposed a treaty of friendship, and offered to restore the prisoners and the statues carried off from Syene. Nevertheless, Petronius captured Napata and destroyed it, carrying off a host of prisoners and much booty. He established a frontier garrison at Premnis, but some years later Candace attacked this outpost. Petronius returned in time to relieve the place, and told the Ethiopians that this time they must send an embassy to Augustus himself. Accordingly, their envoys were escorted to Samos, where Augustus was holding his court at the moment (20 B.C.). He received them graciously and remitted the tribute which had been imposed upon them. We are not told that the statues were given back to the barrack-chapel—or the forum—at Syene.

This narrative suggests two possibilities. The bronze head may have been a part of the loot of B.C. 24, or it may have formed part of a gift to the Queen of Ethiopia following on the reception of her envoys in B.C. 20. Augustus was born in 63 B.C. A statue set up about 30 B.C. would represent him at the age of thirty and upwards.

* The importance of this passage as bearing on the Meroë find was first pointed out by a writer in the *Athenaeum* of June 24, 1911.

A statue made about B.C. 20 would represent him as he was at forty or more. The youthful features and smooth surface of the portrait are in favour of the earlier date.

Augustus travelled through Egypt in the summer or autumn of B.C. 30. It may be that he then went as far as Syene, and that this statue commemorated his visit. Some such hypothesis is required to account for the workmanship of the head; it is finer work than one would expect to find in the *Principia* of a frontier garrison. Its good condition need not surprise us, for the raiders probably saw in it the chief god of the Romans—and those glowering eyes were enough to compel respect. Concealment may have seemed prudent when Petronius began his advance; or was it buried before the doors of this hall in the palace as a charm to put the king's enemies under his feet? A scene on the wall of the Sun Temple shows the king making his enemies his footstool*.

On the other hand, a statue of Augustus commemorating the peace made in Samos may have stood on the pedestal already described (page 66), and have been transformed into some later emperor or Ethiopian king by fitting his bust into the Imperial cuirass. This parsimonious form of loyalty was treason in the Roman Empire, but at Meroë there was nobody to resent it.

Whatever the reasons for its burial, the head is a singularly fine specimen of a very rare class. We have about a hundred marble portraits of Augustus, for several have come to light since Bernoulli's enumeration†. Only last year the Museo Nazionale in Rome was enriched by a statue in civil dress, with remains of colour, found in the Via Labicana. But, owing to the value of the metal, the amount of sculpture in bronze that has survived to our own day is lamentably small. Bronze portraits of Augustus must have existed by thousands, yet only six seem to be known to-day, and three of these are insignificant miniature busts. The others are a mediocre statue found at Herculaneum, now in the Naples Museum; a vigorous youthful head in the Vatican Library; and the Meroë head. Englishmen owe a great debt of gratitude to the Sudan Government and to the officers of the National Art Collections Fund, who made it possible to secure this splendid work of ancient art for the British Museum.

* Meroë, 1909-10, Pl. xxxiii, 3.

† Bernoulli, *Römische Ikonographie* II i. pp. 23-44. He discusses 97 statues and busts, including some that are doubtful. The Vatican bronze, mentioned below, is illustrated (Taf. IV).

EXPLORATION CARRIED ON IN BRITISH HONDURAS DURING 1908-9

By T. W. GANN

SALTILLO *

There are a great number of mounds and earthworks situated at this place, even in the small area which has as yet been cleared from forest. The most remarkable is a quadrangular space, measuring eighty yards by thirty-five yards, elevated from four to five feet above the surrounding ground level, and enclosed by four large mounds, from twelve to thirty feet in height, connected by a bank or rampart ten feet high. Adjoining this is another and smaller quadrangle, also enclosed by mounds. In the centre of each of these spaces stands a small mound four feet high. The central mound in the large quadrangle is itself quadrangular, and faced throughout with nicely squared stones. It measures twenty-five feet by twelve feet, and was approached by three broad stone faced steps, leading up to the central elevation or altar. A trench was dug through the centre of this mound, and it was found to be constructed of blocks of limestone, the interstices between which were filled in with a cement-like substance, containing innumerable fragments of pottery. At a depth of two feet, near the centre of the mound, a small unpainted, unglazed bead vase, containing four greenstone beads, was found; and immediately beneath this, at a depth of five feet, a few pieces of human long bones. No trace was found of a skull or teeth with these. Around the base of the largest mound, which was thirty feet in height, a great number of fragments of pottery incensarios were found, together with the images of the gods which had decorated them externally. Eight complete heads have, up to the present, been obtained, together with two broken ones, and numbers of arms, legs, and bodies, with a variety of small objects which were held in the hands of the images. These vessels were almost exactly similar to those found

* For the positions of the various sites, see Map, Pl. XVII, and for some of the objects mentioned in this paper, see Pls. XVIII and XIX. [Dr. Gann is at present engaged on a Catalogue of his Collection wherein all these objects figured will be fully described.—ED.]

along the valleys of the Usumasintla and Río de la Passion, described by Seler in his 'Antiquities of Guatemala.' Rude specimens, with the face of the god only decorating the outside of the vessel, were also found by Sapper and Charnay in use amongst the Lacondon Indians, a few years ago. The dress and ornaments of these clay figures, which varied from one to two feet in height, are those found almost universally throughout Central America. The huge round ear-ornaments, with a tassel or twisted pendant hanging from the centre, the curious projecting, feather-like ornament above the nose, and the small circular labrets at each angle of the mouth, are present in all, and are highly characteristic. Upon all the feet are elaborate sandals, fastened by thongs attached between the first and second, and third and fourth toes, with a band passing round the front of the ankle, and ending in a broad dependent flap. Around the legs are plain bands, and rows of beads; around the wrists are strings of beads, sometimes fastened by an ornamental loop. The breastplates are of quilted cotton, some very elaborate, and decorated with beads, studs, and tassels, whilst hanging down from the lower part of the breastplate is the 'Maxtli' or small apron commonly worn by Aztecs and Toltecs. The objects held in the hands consist of birds, fans, globes, incense burners, and other less easily distinguishable articles. The whole of the space within the earth-work appears to have been covered with those fragments of pottery vases and idols, but it is only around the base of the large mound that entire heads were found. The fragments appear to have been originally placed upon the ground, and in the course of time covered by a thin layer of earth, as many of them still lie upon the surface, and nowhere are they more than a few inches deep, except at the base of the mound, where earth from its sides would naturally have been washed down by rains and covered them with a slightly deeper layer. On making excavations at various points within the enclosed space, the floor was found to consist, first, of the earth, which contained the broken incensarios, with some blocks of limestone; and beneath this of a layer about four feet thick, composed of marl dust, very small fragments of pottery, and rubble, welded together to an almost cement-like hardness. There are still to be found in the remoter parts of Honduras, Guatemala, and Southern Yucatan, mounds

which have probably never been visited since the Conquest, and upon these are occasionally discovered entire hour-glass-shaped pottery incensarios, with the face or the entire figure of a god (usually Itzauma or Cuculcan) decorating them externally. In the same locality, Sapper saw these vessels in the great Christa of the Settlement of Izan, whilst Charnay found them in the ruins of MencheTinamit.* They do not appear to have been found outside these narrow limits. In my own experience, the presence of great numbers of the fragments of these curious vessels indicates a burial place, and I have no doubt that further excavation amongst the Saltillo mounds, and in the quadrangle, will yield a number of ancient graves.

DOUGLAS. A

A large mound, containing on its summit the ruins of a building, was excavated near Douglas. The mound stood about forty feet high, the last ten feet of which consisted of the roofless walls of a small building, constructed of large blocks of squared stone. On clearing out the débris, the floor was found to be constructed of hard, smooth cement. Beneath one of the walls, a small recess was discovered, and within this were found (*a*) one flint axe head, (*b*) one flint spear head, (*c*) five flint hammer stones, (*d*) three stone beads, together with one spear head, (*e*) four arrow heads, (*f*) four cores, and six knives, all of obsidian. With these objects were three pottery bowls, coloured yellow, nicely polished and decorated in yellow, red, and black. The largest was twelve inches in diameter, and was ornamented externally with two figures of a curious double-headed monster, one head resembling somewhat that of a horse, the other that of a tapir or elephant. Another vessel, nine and a half inches in diameter, stood upon four hollow legs, and was decorated with the figure of the same curious double-headed animal. The smallest, only six and a half inches in

*And from the country of the Yeaiché and Sta Cruz, I have myself obtained perfect specimens found by these Indians on the summits and sides of small mounds which, owing to their inaccessible position in the dense bush, had never been disturbed. These Indians retain no traditions as to the builders of the mounds, though most of them in all probability are not more than a century or two old, and all were erected by their own ancestors, who at the time of the Conquest of Itza, during the last years of the 17th century, still practised their ancient religious rites.

diameter, was decorated with geometrical devices in red and yellow. All these objects were grouped around two large, red, polished, basin-shaped vessels, each sixteen inches in diameter, one of which was superimposed upon the other, and which contained between them a few fragments of human bone, very much decayed. In the mound itself, almost touching the walls of the chamber, was found a large, roughly-hollowed stone, the concavity containing eleven small, light, more or less spherical stones, together with two small circular discs of shell, with alternate quadrangular and triangular markings round their margins, very much resembling the dial of a watch. Collections of these small, very light stones, one to three inches in diameter, are not uncommon in the mounds of Honduras. They vary in number from five to thirteen, and are almost always accompanied by a large spherical stone, ten to fifteen inches in diameter, usually of limestone. They are, as a rule, associated with a burial, and must, I imagine, have been used in some game.* Possibly the small shell discs may have been used as counters or markers in the same game, though I have never before found them associated with the stones.

DOUGLAS. B

A large mound, thirty feet high, with very steep sides, was excavated near Douglas. It was composed of limestone dust and limestone blocks, covered with a layer of earth. About two feet beneath the surface were found a curious reddish vase, with three bulbs and two constrictions, somewhat resembling an hour glass with an extra bulb; a small three-legged vessel of rough pottery, and a very well executed head and shoulders, also of pottery. In the ears of this last were the usual large circular ear-rings; projecting from the bridge of the nose, a curious curved ornament, and round the neck a bead-decorated collar. The excavation was continued to a depth of ten feet, but nothing further was discovered.

*Two remarkably fine stones of this description were found in the Northern District of British Honduras some years ago. They are composed of hard crystalline limestone, nicely polished, spheroidal in shape, weighing about 25 lbs. each, and perforated longitudinally near the top by two holes, intersecting each other at right angles. These stones were found in a small burial mound unaccompanied by any other relics.

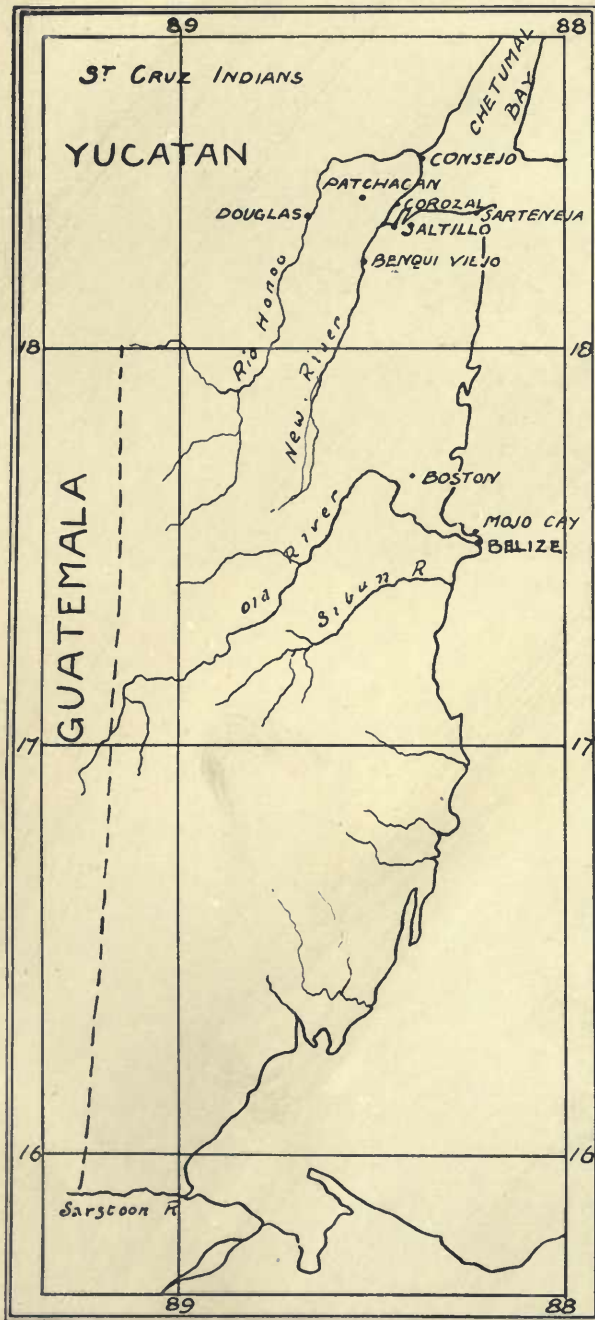
DOUGLAS. C

A small mound, near Douglas, ten feet high, by twenty-five feet in diameter, standing upon the edge of a flat circular elevation about four feet in height, was dug out. The mound was built throughout of alternate layers of cement, about six inches in thickness, and of rubble, from eighteen inches to two feet in thickness. At a depth of two feet, a small clay whistle was found, meant to represent some animal, and provided with three holes, so that by stopping one or more holes with the fingers three different notes could be produced. At the bottom of the mound, near its centre, were found some fragments of human long bones, and mixed indiscriminately with these were three pottery malacates, or spindle whorls, two obsidian knives, one greenstone bead, and one small, red ware, saucer-shaped vessel.

DOUGLAS. D

Several other mounds at Douglas were opened (with indifferent success), one of which may be described, as it represents the typical small burial mound of the district. It was conical in shape, eighteen feet high, and built throughout of limestone dust and large blocks of limestone. Near the centre, at a depth of four feet, was found a nearly spherical vase of red ware, with an opening surrounded by a rim, and covered by a small hemispherical vase of black ware. With these, was a well-made flint spear head. On excavating to a depth of twelve feet, near the centre, there were found two large reddish-yellow plaques. One was twelve and a half inches in diameter, and was decorated round the edge with two curious animals with bird-like heads, long beaks, and frills around the neck. The other, thirteen inches in diameter, was decorated with two animals with heads like seals or manatee, and long, tripartite tails. Within the larger of these plaques were found nine obsidian knives, two greenstone beads, one shell, and one flint spear head. With the plaques was a bowl-shaped vessel, nine inches in diameter, and four and a half inches in depth, one or two nicely decorated potsherds, half a bone ring, and a small pottery face, probably that of a bird. Amongst these objects were a few fragments of human skull and long bones. This is by far the

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BRITISH HONDURAS: MAP SHOWING POSITION OF SITES EXCAVATED.

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BRITISH HONDURAS: SOME TYPES OF BOWLS AND VASES FOUND IN THE EXCAVATIONS.



BRITISH HONDURAS: SOME OBJECTS FOUND IN THE EXCAVATIONS.

commonest type of burial mound found in Honduras. On the summit of the mound, or buried superficially, are a few articles of rough pottery, usually having holes smashed in their bottoms. Deeper down, or at the ground level, generally near the centre of the mound, are a few pieces of pottery of superior ware, a few ornaments, such as beads, gorgets, earrings, etc., with sometimes a few hammer stones, flint spear and arrow heads, and obsidian knives, all surrounding the skeleton.

The Three kinds of Burial

Three kinds of burial seem to have been commonly employed. The poorest class were buried in large flat mounds, sometimes half an acre in extent, and containing as many as forty or fifty interments. The body was buried with the feet drawn in to the pelvis, the knees drawn up to the chin, the arms crossed over the chest, and the chin pressed down on the pubes; the position, in fact, in which it took up least room. With it were usually a few flint hammer stones, a few clay or shell beads, a few weapons of the roughest type, and one or two common unglazed pottery vessels. The mound last described, at Douglas, is typical of the next kind of burial, each individual having a mound to himself varying from two to thirty feet in height. The position of the skeleton, where it has been possible to ascertain it, is usually, though not invariably, the same here as in the first variety.* The third mode of burial was reserved probably for the priests, caciques, and other important individuals. The interment took place in a stone cist or chamber within a large mound, varying from twenty to fifty feet in height. The skeleton is found stretched at full length, and surrounded by nicely painted and decorated vases, beautiful greenstone, shell, obsidian, and mother-of-pearl beads, gorgets, studs, ear-rings, and

*Occasionally, however, the body is found buried head down; the arms in this case are folded across the chest, the thighs flexed, and the knees jammed tightly on to the shoulders. In two instances of this form of burial a large, heavy, flat stone, from which a semicircular piece had been removed, was placed over the lower jaw, the neck fitting into the groove in the stone, as if to prevent any possibility of the corpse leaving its grave.

other ornaments.* Less frequently the curious ceremonial flints, sometimes of immense size and elaborate workmanship, found only within a very narrow area, consisting of Yucatan, Honduras, and the adjacent part of Guatemala, are present in these burial chambers.

MOHO CAY

This is a small island, chiefly composed of mangrove swamp, situated near the mouth of the Mopan River. At its eastern extremity are a few acres of solid land, which are, however, rapidly being eaten away by the action of the sea. This island was at one time evidently much more extensive than it is at present, and formed apparently a sort of fishing station for Indians coming down the Mopan river in their doreys from the interior. On dredging beyond the eastern end of the island, large quantities of manatee bones were found, together with small spear and javelin heads of nearly black flint, and great numbers of small pottery rings, varying from half an inch to two inches in diameter. Most of these rings had evidently been manufactured from pieces of broken vessels, some of which had not even been rounded on their outer margins. On excavating upon the island itself, abundance of chips of the same dark flint, manatee bones, and rings were found, together with numerous potsherds. It is difficult to imagine to what use these rings can have been put, but their association with great numbers of manatee bones would suggest that they had been employed in some way in the capture of that animal, possibly as net sinkers. Judging by the number of bones found, manatee must at one time have abounded at the mouth of the Mopan river, though none are to be found there at the present day. Indian mounds and relics are common upon most of the habitable cays along the coast of Honduras. Probably the most interesting of these is a small island named Wild Cane Cay, situated near the mainland, at the extreme South of British Honduras. It is only a few acres in extent, and has apparently been almost entirely built up artificially,

*Sometimes these mounds contain two, or even three chambers or cists superimposed one upon the other; the skeleton is then usually found in the top cist, the accompanying belongings occupying the lower ones. Very rarely partial cremation was practised, and fragments of the half-burnt bones are found within a large pottery urn.

by depositing blocks of reef stone upon the foundation of a small mangrove cay. There are four mounds upon the island, built of reefstone and earth, into which the owner, wishing to obtain stone, has recently been digging. At a depth of about four feet, in one of the mounds, a human skeleton was discovered, with which was a small spherical earthenware pot containing a flint spear head, two copper rings, a copper ornament, and the upper part of the left femur of some animal of considerable size. The femur is decorated throughout its whole extent with elaborate designs, neatly etched upon the surface, amongst which conventional representations of the heads of the Maya Gods Cuculcan and Itzauma are easily distinguishable. The copper ornament consists of a head, wearing what appears to be a crown of thorns or spikes. The face is long and bearded, and quite un-Toltec in character, whilst attached to the back of it is a small cross. These copper objects show, I think, undoubted Spanish influence, as rings do not appear to have been worn by the Toltecs before the Spanish Conquest, and the head is, if not a head of Christ, undoubtedly a Christian symbol. It would appear as if the individual, whose remains these objects accompany, was wavering in his allegiance between the old and the new faith, and, determined in any case to be on the right side, had symbols of both buried with him.

BOSTON

Situated above four miles from the left bank of the Mopan river. Four mounds were opened here. No. 1 was thirty feet high, conical in shape, and built almost entirely of blocks of chert, of which there is a great abundance in the neighbourhood. Around the base were placed six oblong, squared stones, each six feet long, three feet broad, and one foot thick, and each buried for five feet of its length. On digging around these stones, a granite rubbing stone, with a limestone rubber, were found, together with five pieces of flint in process of manufacture into spear heads. On excavating in the centre of the mound, at a depth of six feet, portions of a single skeleton were exposed, which had apparently been buried in the prone position. It was simply covered with earth and blocks of chert, nor were there any signs of a cist or chamber having existed

around it. Arranged about the head were the following objects: a small polished conch shell with three perforations, the apex smoothly sawn off, probably for use as a trumpet; a nearly spherical stone, two and a half inches in diameter; a flat, circular stone, one and a half inches in diameter; and lastly, two nearly spherical vessels, six inches in diameter, of rough, unglazed pottery. Mound No. 2 was three feet in height, fifteen feet in diameter, and built entirely of blocks of chert. Although the whole mound was dug away, nothing whatever was found, either within or beneath it, but a few potsherds. Mound No. 3, five feet in height, twenty-five feet in diameter, was also constructed entirely of blocks of chert. At the centre of the mound, near the ground level, fragments of human bone were found, together with two obsidian knives, an imperfect spear head, a small, nearly spherical vessel, of rough, unglazed pottery, and fragments of a vessel which had contained a black carbon-like substance, probably burnt incense. I have never before seen a single mound burial accompanied by so few, and such poor, possessions; even the multiple burials in large flat mounds, and burials in the earth, without mounds at all, are usually accompanied by more numerous and valuable objects than were placed with this individual, who possessed a mound to himself. Mound No. 4, twelve feet high, twenty-five feet in diameter, was built of blocks of chert, with earth and limestone dust. At the bottom of the mound, near its centre, were found fragments of bone representing three human skeletons. The bodies had apparently been buried in the crouching position already described. With the bones was a rough, unglazed pottery vessel, six inches in diameter, and within this were two circular shell discs, a cylindrical pottery bead, and a greenstone ornament shaped like a turtle's back, with a number of small perforations round the edge.

At two places on the surface of the ground at Boston, numbers of chert fragments were found, on removing which great accumulations of chips many square yards in area, and from six to eighteen inches in depth, were brought to light. Amongst these were found spear heads, axe heads, javelin heads, scrapers, knives, and hammer stones in almost every stage of manufacture, from the roughly blocked-out flint to the perfect implement. Many hundreds of rejects were found. Boston, owing to the occurrence of blocks of

chert and flint, of all sizes, and in great profusion, in the neighbourhood, had at one time evidently been the site of a considerable manufactory of implements and weapons. These chips, even when lying exposed upon the surface of the ground, look extremely fresh, and show no signs of weathering. It is probable that most of them are of no great antiquity, as there is a tradition in the neighbourhood, that little more than one hundred years ago, when there were still a considerable number of Indians along the banks of the Mopan river, who used stone weapons and implements, Boston was the principal centre of manufacture in which these articles were produced, and from whence they were exported in considerable quantities to the surrounding Indian tribes.

COROZAL. A

A mound, containing multiple burials, was completely excavated not far from Corozal. It was eight feet in height, nearly circular, and forty feet in diameter. It was capped by a layer of reddish brown earth, six inches to one foot in thickness, and beneath this was composed of alternate layers of soft cement, each about one foot thick, and of small limestone rubble, about two feet thick. Scattered over the surface of the mound, just beneath the earth capping, were found a number of fragments of clay idols: the best preserved of these consisted of three human faces, an arm and hand, holding a small bird, a bird's head, an alligator's head, and a pleated cotton breastplate. At depths, varying from two to three feet, six interments were found; in no case was anything left but a few fragments of the skulls and long bones, not, in fact, sufficient to determine the position in which the corpse had been placed at burial. With the bones, in some cases close to them, in others at some little distance, the following objects were found: one rubbing stone (for grinding corn), two pear-shaped flints, nine flint hammer stones, one axe head, one flint scraper, one broken hone of slate, one flint spear head, two fossil shells, two pieces of brick-like pottery, one pottery disc, three small beads, and one shell. On reaching the ground level, of hard compact black earth, it was found that an oblong trench had been cut through it, down to the limestone rock beneath, three feet in breadth, and varying from two to four feet in depth. This trench had been filled up with

small rubble, and in its inner wall, at the north end of the quadrangle, three interments had been made by scooping out small holes in the earth, depositing the remains within them, and filling in with limestone dust and rubble. With one of these burials was found a small three-legged pot, of rough, unpolished pottery; with another, a vessel in the shape of a quadruped, seven inches in length, whose identity is difficult to determine; and with the third, a small saucer-shaped vessel of red ware, and a nearly spherical vessel of dark polished red ware. Within the latter were found a few small animal bones, a few large freshwater snail shells, such as are found at the present day in the neighbouring swamps, and eaten by the Indians, and a few bivalve shells. It seems probable that this vessel contained food, either as an offering to the gods, or for the use of the deceased in his journey to the next world. It is not uncommon to find considerable accumulations of the shells of conchs, cockles, snails, and other edible shell-fish, together with the bones and teeth of deer, tiger, gibnut, snake, and manatee in the mounds of Honduras; but I have never before found a food offering contained within a vessel, as in this case. A number of these large, flat mounds, containing multiple burials, have from time to time been completely dug down near Corozal, in order to obtain stone for the roads. Beneath nearly all of them were found trenches cut through the earth down to the subjacent limestone. These trenches varied from two to five feet in breadth; in the case of the smaller mounds they formed a square or quadrangle; in the larger mounds, two squares or quadrangles were joined by parallel trenches. They were invariably filled with small rubble, and sometimes contained interments in their sides, sometimes not. Their purpose is difficult to surmise, as they could hardly have served as foundations; drainage was unnecessary, and, whilst the trenches themselves were never employed for sepulchral purposes, it is only occasionally that a few burials are found in the earth along their margins.

COROZAL. B

Another mound was excavated near Corozal, roughly circular, six feet in height, and thirty feet in diameter. It was covered by a layer of brown earth about one foot thick; beneath this it was con-

structed of limestone blocks, and friable cement, to the ground level. About the centre of the mound, immediately beneath the earth layer, were found two flint hammer stones, together with two bowl-shaped vessels, with holes smashed in their bottoms. These had originally been of fine black polished ware, but were so much weathered that the original colour and polish remained only in a few places. It is quite frequent to find that vessels placed upon, or only superficially buried in, a mound, have had large holes knocked in their bottoms; probably to prevent the possibility of their being stolen, and used again. Nothing further was found in this mound, but on digging down to a depth of two feet in the earth upon which it rested, the limestone rock was exposed, and on this lay a large flat slab of limestone, upon which rested the very fragmentary remains of two human skeletons. With one of these were two vessels; a four-legged red ware bowl, jammed tightly over a small spherical red ware vase, together with a piece of stucco with linear markings upon it. The other skeleton was accompanied by a single red-ware vessel.

COROZAL. C

A large flat mound was excavated near Corozal; it was five feet high at the centre, fifteen yards in diameter, and built of earth, blocks of limestone, and limestone dust. No interments have been brought to light in this mound, but scattered throughout it were found thirteen flint hammer stones, a broken flint axe head, eleven small flint scrapers, and a fragment of animal bone which appears to have been employed as an implement of some sort. These objects were found scattered indiscriminately throughout all parts of the mound, from the surface to the base, and from the centre to the periphery. At the base of the mound, near its centre, was found a nicely coloured and polished red bowl-shaped vessel, ten inches in diameter. Nothing was found with it. One frequently finds mounds in this district containing objects which denote a burial, but no trace of bones is to be found. Again, mounds which were, from their size and shape, presumably burial mounds, are found to contain absolutely nothing. It is probable that in both cases the bones have, owing to the age of the mound, or some special

quality in the soil, completely decayed away, leaving no trace behind them.

Another small mound of this kind was dug down near Corozal. It was four feet high, eight yards in diameter, and built entirely of limestone blocks and dust. It contained nothing but numerous potsherds, which were scattered throughout it, and three small flint hammer stones, which were found at the base, near the centre.

COROZAL. D

A large, flat mound, not over two feet high, was dug out by men working for the District Board at Corozal. In the marl beneath the mound, at a depth of about two feet below the surface, was found a human skeleton, in a squatting position. The knees were drawn up to the pelvis, the arms folded across the chest, the back bent, and the head pressed down on the folded arms. Unfortunately, the skull, which was the first part of the skeleton to be exposed, was completely broken up by the labourers before I came upon the scene.

COROZAL. E

Another small mound, six feet high, and thirty feet in diameter, was dug out near Corozal. It was built of blocks of limestone, limestone dust and earth. Near the surface fragments of two shallow bowls of red pottery were found; together with an almost perfect incensario nearly two feet in height, with a human figure, considerably broken, attached to its outer surface. At the ground level, near the centre, human bones, with a small yellowish pot, were found, together with some rude beads, hammer stones, and spear heads, and a nearly spherical pot of dark red ware.

BENQUE VIEJO. A

Near this village is a large mound forty feet in height, and close to the base of this, several pieces of rough pottery were noticed sticking out of the ground. On digging over an area of perhaps forty feet square, great numbers of fragments of clay idols, similar to those already described as having been found at Saltillo were unearthed. They were buried in black earth, at all depths, from the surface to three feet beneath it. A few large blocks of limestone were also found, upon which it is possible that the

incensarios were broken up, before their fragments were scattered broadcast over the soil. At a depth of three feet, a small, roughly constructed stone cist, eighteen inches square, was brought to light, filled with rubble and earth. At the bottom of this lay a few fragments of human bone, so friable, however, that it was found impossible to preserve the skull. This must have been a secondary burial, as the cist was so small that it would have been impossible to have squeezed the body of an adult human being into it. Mingled with the bones were three small unpainted pots. One of these was in the shape of a double-headed animal; one head that of an alligator with distended jaws, in the act of swallowing a human face; the other head, situated at the opposite extremity of the animal, looked at in one direction resembles a bird, but if turned upside down, it represents the face and upper jaw, provided with a single row of formidable teeth, of some unknown animal. This pot contained thirteen small red and green beads, perforated, and nicely polished. The second pot was decorated on its outer surface with a human face, the third was undecorated, and stood upon three legs. None of these pots contained anything. I have on several occasions found small vessels in the shape of an animal in the act of swallowing a human head; sometimes the head only, sometimes the arms and upper part of the body, projecting from the monster's widely distended jaws. These vessels always contain a few beads, and have been generally associated with fragments of incensarios, and human bones. This symbol, both amongst the Aztecs and Toltecs, represented either the earth, or the under-world. Employed to decorate a mortuary vase, it may have the latter significance.* The animal represented is not always the same; it may be an alligator, a shark, a giant turtle, a tiger, or some mythological beast; but it is invariably a rapacious and destructive animal of some kind.

BENQUE VIEJO. B

Near this village a small mound, four feet high was dug down. Near the centre, within a few inches of the surface, a small clay cylinder, with an incised geometrical device covering it, was found.

*Or may represent the individual being swallowed by the earth, and so symbolise death, as it frequently does in the Mexican codices.

This had probably been used as a stamp or seal, as larger cylinders which were used for this purpose are not uncommon in the mounds of Honduras and Guatemala. Nothing further was found in the mound.

PATCHACAN

A mound was dug out near this village, six feet high, and twenty-five feet in diameter, built of blocks of limestone, and limestone dust. Near the centre of the mound, resting on the ground level, remains of two interments were found, represented by a few pieces of the long bones. With one of these was a shallow, bowl-shaped vessel of red ware, and with the other a similar, but somewhat larger vessel, together with six small, and one large roughly spherical stones. As has before been pointed out, nests of a single large, and a number of small, more or less spherical stones are frequently encountered in these mounds, and were probably used in some game.

SARTENEJA

Situated on the coast about sixteen miles from Corozal. This seems at one time to have been the site of a considerable pottery manufactory, as small mounds, composed of nothing but potsherds, are found along the beach. The sea, which is gradually encroaching, also washes out great numbers of potsherds, together with an occasional entire vessel. A small, circular vessel of red ware, with handles on the rim, together with a red ware bowl, were washed out in this way. A little further inland, I dug out a mound composed of nothing but a great accumulation of conch shells, and containing nothing beyond a few fragments of pottery.

SAN ESTEVAN

At San Estevan, on the New River, three mounds were explored. One of these was twenty-five feet in height, the other two, twelve feet and eight feet respectively. All were built of blocks of limestone firmly held together with limestone dust, forming a sort of cement. In the centre of the largest mound an excavation eighteen feet deep was made; the other two mounds were dug out down to the base. Nothing whatever was found in any of these mounds,

with the exception of numerous potsherds, for the most part rough and unpainted, which were scattered throughout them in great profusion.

CONSEJO

A small mound, three feet high by fifteen feet in diameter, was dug down near this village. It was composed of brown earth, with innumerable pieces of rough unpainted pottery, fragments, apparently, of rude, thick-walled vessels of large size. Amongst these, indicating that at least one image-bearing incensario had been smashed with the other vessels, were found a good sized alligator's head, with a human face between the widely opened jaws, portions of two human faces, and several arms and legs, all of rough, unpainted pottery.

CHETUMAL BAY

In a small mound, near the island of Tamalcal, some Indians, cutting bush to make a corn plantation, came across a small mound, in which they made a shallow excavation. About two feet from the surface, a rubbing stone, for grinding corn, made of Esquipulas stone, was found. It was shaped like an animal, standing upon three legs; the back of the animal being used as the grinding surface.

MISCELLANEOUS FINDS

Five small axe heads were found near the surface at Starm Creek whilst constructing the railway.

A stone idol, probably connected with phallic worship, was found by an Indian near Morales. This object was worshipped for some time by the owner, as a 'Santo,' and traces of wax may still be seen upon it from the candles burnt in its honour. Finding that it was an unlucky 'Santo,' he was easily persuaded to part with it.

A pot-leg was washed out by the sea in the island of Ruatan.

A large flint was found on the beach at Payo Obispo, Quintana Roo, Mexico.

A HITTITE BRONZE STATUETTE

By JOSEPH OFFORD

In Plate XX is given a photograph of a bronze statuette that was brought into Cairo for sale last December, by a fellah who could not be credited as to his statements as to where it was really found. It probably, however, came from the Delta. It was purchased by M. Nahmann, the Cairo Collector, and the photograph is published by his permission.

The statuette is, in my opinion, the first specimen of such work by a Hittite artist, and if this view is correct it will be an important specimen in respect of its peculiar type and the characteristics of the figure.

The position in which the female deity is placed, erect, upon a lion or panther, is similar to that of many Hittite reliefs and to the small bronze from Killiz, figured in Prof. Garstang's *The Land of the Hittites*, Pl. XL. A relief showing a god standing upon a bull is figured in the same work, Pl. XLIV, but the nearest approach to the style of this new statuette is in the famous rock relief at Boghaz Keui, carved within the large recess at Iasily Kaya, and actually representing a female upon the back of a panther (*ibid.*, Pl. LXV). The head-dress or tiara in the Boghaz Keui figure is somewhat different, but the animal appears to be identical. A deity standing erect upon the back of an animal is a common *motif* upon Hittite cylinders, as shown by two such figures in Ward's *The Cylinders and other Ancient Oriental Seals in the Library of J. Pierpont Morgan*, Pl. XXXI, 237, and Pl. XXXII, 243. In the first the animal is a bull, in the second probably a lion.

The chief interest, however, in this new Hittite statuette arises from its apparent affinities with Hindoo figures, which is important in the light of Dr. Winckler's discovery of the names of several Vedic divinities* among the cuneiform-written Hittite records from Boghaz Keui. The type of this bronze, especially the width of the

*[Among the Mitanni. J. G.]

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A BRONZE HITTITE STATUETTE.

bust, the position of the right arm, and the anklets, are all reminders of Hindoo work.

In connection with this supposed relation between Hittite and Hindoo art, I may further instance an especially finely preserved Hittite cylinder in Mr. Pierpont Morgan's collection, Pl. XXXI, 235. This shows a kneeling female deity of even more pronouncedly Hindoo type. Moreover, the frequent delineation upon Hittite cylinders of the zebu or humped race of cattle† appears also to connect some of the Hittite tribes with the Old Aryan Vedic peoples.

†See, further, on these humped cattle, Père S. Ronzevalle, *Le Boeuf Bossu en Syrie* in the *Mélanges de la Faculté Orientale* of the Université Saint Joseph, Beyrouth. M. Ronzevalle publishes, in Pl. VIII, photographs of an ancient bronze statuette which, he says, must have once supported a figure of a divinity in Assyrian or Hittite style, because upon its back are moulded two sockets to receive the feet of the figure. The type of this bronze is like a humped bull shown upon a Syrian or Hittite cylinder in the *Collection de Clercq*, Pl. XXXII, No. 368. Also see *Journal Asiatique*, 1909, p. 161.

HITTITE ARCHIVES FROM BOGHAZ KEUI

ARRANGED IN CHRONOLOGICAL ORDER

Translated from the German transcripts of Dr. Winckler in the *Mitteilungen der Deutschen Orient-Gesellschaft* (No. 35, Dec., 1907)

BY META E. WILLIAMS

*Extract XI, p. 32**Treaty between Subbiluliuma and Mattiuaza, King of Mitani*

‘When the Sun, Subbiluliuma, the Great King, the Noble, the King of the Khatti, the beloved of Tessub, and Artatama, King of the Kharri, had made a treaty between them, Tushratta, King of Mitani, exalted himself against the Great King, the King of the Khatti, the Noble; and the Great King, etc., rose up against Tushratta, King of Mitani, and plundered the left bank of the Euphrates, and added the mountain of Niblani to mine inheritance. Then for the second time Tushratta defied me, and said thus:—
“Why hast thou plundered the left bank of the Euphrates, which belongs to Tushratta, King of Mitani? If thou dost plunder the lands on the left bank of the Euphrates, then will I plunder those on the right bank of the Euphrates. If thou dost plunder it, what shall I do in return? I will even cross over, and take the right bank of the Euphrates for myself, whether (it be land) belonging to mine own kingdom (or not).”

‘But the Great King, etc., bade him defiance, in return. (For in the time of the father of the King of the Khatti, the land of Isuwa revolted; and people from Khatti withdrew into the land of Isuwa.) (The reason of this was, that) the people of the city (here follows a list of those concerned) had revolted in the time of my father; but the Sun, Subbiluliuma, etc., had conquered them. So, at that time, these people who had escaped my hand, went into Isuwa. All these people and lands had revolted, in the time of my father; and as from Isuwa, settled in the enemy’s land (abroad). And the Sun, Subbiluliuma, marched out; in answer to King Tushratta’s challenge I crossed the Euphrates; I marched against Isuwa, and punished the whole of Isuwa. I brought them into subjection to me for the second time. All the people and petty states, which in the time of my father went over to Isuwa (here follows a list) I punished; and brought them back to Khatti

(conquered them). The (country people of the) lands I conquered, I released; in their own places they remained to dwell. But the (city) folk whom I released went to their own people; and the Khatti entered into their possessions.'

Extract XII, p. 33

Mitani Treaty between Subbiluliuma and Mattiuaza

'Then the Sun, Subbiluliuma, etc., I marched to the Land of Alsha. I took the citadel of the city of Sutmar, and I gave it to Antaratli, from the Land of Alsha for a present. . . . But Tushratta . . . marched out against me; it did not come to a battle.'

Extract XIII, p. 34

Mitani Treaty between Subbiluliuma and Mattiuaza

'I made a circuit (I crossed) the Euphrates; the Land of Khalpa (Aleppo) and the Land of Mu-?-Khi, I punished. Takuwa, King of Nî, made a treaty with his brother A-bu-(!)-Tessub against (me). The Land and City of Nî, thereupon, revolted against Takuwa, and A-ki-(!)-Tessub, his brother. But (I, Subbiluliuma) overthrew that (people) I made them subject to Akia, the King of Arakhti. The City of Arakhti strengthened itself and revolted:—"Against Subbiluliuma will we fight." The Great King, etc., conquered Arakhti; Akia, King of Arakhti, Aki-Tessub, the brother of Takuwa, and that (people), together with all their belongings, he took prisoners, and brought them to Khatti. The City of Katna, with all its territory, and its possessions, he made subject to Khatti.'

Extract XV, p. 35

Temp. Subbiluliuma

'When I marched against Nukhasse, I took all the lands (of the several districts). Sarrupsi (the king) absconded. His mother, brother, and sons, I took; and brought to Khatti I set the servant of Sarrupsi over the city of as king, and marched into the district of Abina. I did not think to seize upon Kinza, but Sutatarra, together with Aitakama, his son, his nobles, and his brothers to Khatti. I marched against Abina. . . . Because of the insubordination of King Tushratta, I plundered all those lands in one year, and made them subject to Khatti. From the mountain of Niblani, from (the bank) of the Euphrates, I have added them to my territory.'

*Extract XVI, p. 36**Treaty between Subbiluliuma and Mattiuaza of Mitani*

‘ When his son had conspired with his servants and slain his father, Tushratta, and Tushratta was dead, Tessub gave judgment in favour of Artatama, and granted life to his son Artatama. And the Land of Mitani went to utter ruin. The Assyrians and Alshians divided it between them. But the Great King, etc., did not then cross over the bank of the Euphrates, nor exact tribute and taxes from the Land of Mitani. When the Great King heard of the impoverishment of the Land of Mitani, he sent thither palace-people (royal officials) with cattle, and sheep, and horses, for the Kharri folk were in a miserable state. Sutatarra and his nobles tried to put Mattiuaza, the King’s son, to death. But he fled and came to the Sun, Subbiluliuma. The Great King said: “ Tessub has given judgment in favour of Mattiuaza, the son of Tushratta, in that I take him by the hand (help him) and set him upon his throne. So that the great land (great power) of Mitani may not go to ruin, the Great King, etc., has restored the Land of Mitani to life, because of his daughter; and I have given my daughter to Mattiuaza, the son of Tushratta, to wife, and taken him by the hand.” ’

*Extract XVII, p. 36**Mitani Treaty between Mattiuaza and Subbiluliuma*

‘ While Sutarna (!), the son of Artatama, bore rule in Mitani, his father did not deal well with the land. He squandered all his treasure, and gave it away in presents to Assyria and Alshe. Tushratta had built a palace and furnished it splendidly. All the treasures that were in it he sent to the Assyrians, who had been his father’s vassals. Sa-us-sa-tar, the great-great-grandfather (p. 37) of Mattiuaza, had carried off a door of gold and silver from Assyria, and set it up in the palace in the city of Waraganni. But Sutarna gave it back to Assyria; and all the gold and silver besides, to Alshe; and wasted all the property of the kings of Mitani. He also plundered the houses (estates) of the Kharri people, and sent everything off to Assyria and Alshe. But Abu-Tessub fled from him to Karduniash (Babylon), and 200 chariots with him. The King of Karduniash took the 200 chariots and their charioteers, which Abu-Tessub brought over (?) with him, for himself. But Abu-Tessub, along with his nobles, he . . . ed (uštīmḫir). He

sought his life, even with intent to kill Mattiuaza, the son of Tushratta, and ed me. I escaped his hand. To the gods of the Sun, Subbiluliuma, I fled, and they preserved me on my way. The gods of Khatti and Mitani granted that I should reach the Sun, Subbiluliuma.'

Extract XXIV, p. 51

Mitani Treaty between Subbiluliuma and Mattiuaza

List of Deities:

'ilâni Mi-it-ra-aš-ši-il ilâni u-ru-wa-na-aš-ši-il.'

Variant: 'a-ru-na-aš-ši-il'

'ilu (!) in-dar ilâni na-ša-a(t-ti-ia-a)n-na'

Variant: 'in-da-ra na-š(a)-at-ti-ia-an-na.'

Extract XIV, p. 34

Temp. Subbiluliuma

Letter of the King, Akizza of Kinza, to Amenophis III

'Aitakama hath even now written to me, saying: "Go over with me to the King of Khatti." But I have answered: "Though I should die, I will not go over to the King of Khatti. I will be true to the King of Egypt." Thus did I write concerning the King of Khatti.'

'As I am devoted to the King; so are also the King of Nukhasse, the King of Ni, the King of Kinzar, and the King of Tuanat.'

'Arsawia, Prince of Rukhsi, and Tauwatti, Prince of Lapawa, are joined with Aitakama, Prince of Kinza, and they hold with (the King of Khatti).'

Extracts XVIII, p. 46

(a) *Fragment of a letter, perhaps addressed to an Assyrian by Subbiluliuma*

'Adad-nirari, thy Lord.'

(b) *Fragment of a letter, possibly dealing with Assyrian affairs,*
'to Ba-ba-hach-iddin; Thy lord is dead.'

Extract I, p. 19

Temp. Mursil

'Thereupon I marshed (?) against Mira; and I gave Mira to Barhu-iluwa; the Land of Amashêhaku I gave to Ma-na-pa-Tessub; the Land of Hapallama I gave to Tar-ga-aš-na-al-li.'*

* nam-na- I-NA MÂT ALU mi-ra-a (thus! also elsewhere!) pa-a-un nu MÂT ALU mi-ra-a a-na I bar-hu-Itu (zu?)-wa AD-DIN MATU a-ma-se-e-ha-ku A-NA I ma-na-pa-tesub AD-DIN—MATU hal-pa-la-ma A-NA I tar-ga-as-na-al-li AD-DIN.

*Extract XXI, p. 44**Amorite Treaty between Mursil of Khatti and Abi-Teshub of Amurri*

‘Aziri, thy grandfather, oh, Abi-Teshub, revolted against my father. My father reduced him to submission. When the kings of Nukhasse and Kinza rose against my father, thy grandfather did not revolt. When . . . my father went to war with his enemies, thy grandfather, Aziri, also went to war with my father’s enemies. He guarded A-la-ra-na-du; he did not displease my father. And my father protected Aziri and his land; no evil came upon Aziri and his land. Three hundred (shekels) of gold . . . my father imposed upon thy grandfather, as a gift and tribute. He paid them every year; he never withheld them; never displeased my father. When my father died, I ascended the throne of my father. As thy grandfather, Aziri, dealt with my father, so did he deal with me. When the kings of Nukhasse and Kinza revolted again against me, thy grandfather, Aziri, and thy father, Du-tessub, did not join them.’

*Extract III, p. 22**Letter of Hattusil II to Katashman-buriash, son and successor of Katashman-turgu, King of Babylon*

(I and thy father), ‘made a marriage alliance, becoming brother-in-law, and were true brothers . . . when thy father died, I wept for him as a true brother . . . and I sent my ambassadors to the great ones of Karduniash, with this writing: “If ye do not acknowledge the son of my brother as king I will be your enemy, and I will conquer Karduniash. Contrariwise, should an enemy attack you, or commit any depredation upon you; tell me; and I will come to your aid.” But, my Brother, that letter was not laid before thee, at that time . . . (and lest that letter should now be read before thee, I have written down these words, being a repetition of what was said before). For Itti-Marduk-balatu (the then ambassador, or a minister of the court of Babylon) may the gods deprive him of breath while he lives, so that the evil words in his mouth may not come to pass; he hath grieved me much with that which he hath written (in that he wrote) to me, saying: “Thou dost not write like a brother, but layest thy commands on us as if we were thy vassals.”

‘Wherefore, I replied to my brother: “How should I command you as my vassals? The people of Karduniash cannot coerce the

people of Khatti; nor they them. It was with friendly intent I wrote those words to them, in order that they might recognise the posterity of my brother, Katashman-turgu. And that was how Itti-Marduk-balatu answered me. What masterful language had I used to him that Itti-Marduk-balatu should so answer me? I only wrote him saying: 'If ye do not acknowledge the son of your lord, then, should an enemy attack you, I will not come to your help.' But I did not take the answer of Itti-Marduk-balatu to heart. For my brother was yet a child; and he is a bad man who acts according to his own mind. So why should I take it in bad part?"

'And now, my brother complains that I have discontinued sending my letters and ambassadors. I have only done so on account of danger from the Beduin (Ki-akhlamu nakur, Aramaic Beduin danger). But out of every trifle, Itti-Marduk-balatu makes trouble with my brother. . . .'

Extract IV, p. 26

Temp. Hattusil

'which concerns, that my brother has written to me (that is to say, asked me) about the embassy from the King of Egypt; (as regards the embassy of the King) of Egypt, I will inform my brother in these words; (the King of Egypt) and I have made a marriage alliance, becoming brothers-in-law; and have made ourselves brethren, and have made this agreement together: "Brothers we are; and therefore we will (fight against) a common foe, (and with a) friend we will have friendship in common." And as the King of Egypt (formerly) invaded (Khatti) as I wrote to your father Katashman-turgu' and so on.

Extract VI, p. 26

Temp. Hattusil

' I have heard that my brother has come to man's estate, and is fond of hunting.* (And I was exceedingly glad) that Tessub prospers (?) the successor of my brother Katashman-turgu. (That being so, I counsel thee:) "go and plunder the land of the enemy." If I hear (that my brother) has slain the enemy, then shall I say of my brother: "Behold a king who knows how to wield weapons (?) My brother do not delay to march against the land of the enemy; smite the foe march against that land, for thou art three, nay four times, a match for it."'

* The heroic employment of kings.

Extract V, p. 24
Temp. Hattusil II

Letter to Katashman-buriash, King of Babylon

‘Furthermore, I would inform my brother, that concerning Banti-shinni, about whom my brother writes: “He troubles the land,” I have asked Banti-shinni, and he has answered me: “I had a claim for 30 talents of silver, against the inhabitants of Akhad.” But now that Banti-shinni has become my vassal, my brother can bring an indictment against him for disturbing the land of my brother; and he shall answer for it in the presence of thy ambassador, Adad-shar-ilan, and before the gods (i.e., in a court of law). And if my brother will not conduct the suit himself, then let thy servant (official or vassal) who has heard that Banti-shinni has molested the land of my brother, come and conduct the suit. I will bring Banti-shinni there, to answer for himself. He is my (vassal). If he wrongs my brother, does he not also injure me?’

Extract II, p. 19
Temp. Hattusil

‘My father, Mursil, had four children, Hal-pa-as-su-lu-bi-i(a), Mutallu, Hattu-sili(s), and his daughter Ilani-ir-in-na. When my father, Mursilis, was dead, my brother, Muttallis, ascended the throne of his father. But (?) against my brother, the general of the army’*

Extract XX, p. 43
Treaty between Hattusil II and Amurri

‘In the time of my (Hattusil’s) grandfather, Aziri, King (of Amurri) fell away (?) from Egypt, and (cast himself) at the feet of my grandfather, Subbiluliuma. My grandfather bestowed his (favour) upon him. He made a treaty with him, and wrote down the boundaries of Amurri, as they had been in the time of his father, and gave them to him.

‘When my grandfather, Subbiluliuma, was dead, my father, Mursil, son of Subbiluliuma, ascended the throne. Te-Tessub made

* ‘mah-an-na-za A-BU-IA I mur-ši-li-iš il-li-iš ki-ša-at, AHI-IA ma-za-gan I muttalli-iš A-NA KUSŠI A-BI-ŠU e-ša-at am-mu-uk-ku-za A-NA PA-NI AHI-IA BÊL Ki-Rib-Bat (KARAŠI) ki-iš-ha-ha-at nu-mu AHI-IA A-NA Raš Me Se ti ut ti ti-it-ta-nu-ut MÂT ALI ÊLI-TI ia-mu ma(ku?)-ni-ia ab-ha-an-ni bi-es-ia nu MÂT ALI ÊLI-TA niš-ta-bar-ha ti-ra-an ma-at-mu I ILU SIN-(IBU) tešub-aš mar I zi-da-a ma (ku?)-ni-ia-ab-hi-es ki-it nu-mu ilu istar BÊLTI-IA ku-it ka-ni-eš-ša-an har (mur)-ta AHI-IA is-mu I muttali-is a-as-su-uh-ta nu-mu-kan mah-an NIŠI-an-na-za, etc.’

himself king in Amurri. But the treaty which my grandfather had made with Aziri, the treaty of my grandfather, that they held to.

'After my father; Muttalu made himself king. Muttalu, my brother, (after him), Abbi-Tessub died, and Put-Akhi made himself king of Amurri. Muttali (!), my brother, deposed Put-Akhi, and brought him into the Land of Khatti. Then I begged Put-Akhi from my brother, and brought him into the city of Haggamissa. I made him a house. No ill befell him. I had him in my care and custody.

'When Muttalu, the Great King, was dead, I, Hattusil, ascended the throne of my father. I set Put-Akhi over Amurri again, and restored him to his father's inheritance, and royal throne. A marriage alliance with one another concluded. My son, Nerigga-Shama, took the daughter of Put-Akhi, of Amurri, ... to wife; (and I gave) the King's daughter, Gashuliawi, to Put-Akhi, in the royal palace in Amurri, (to) wife. (In) Amurri, she shall remain as queen. The sovereignty over Amurri shall belong to the son and grandson of my daughter in time to come.'

Extract VII, p. 27

Temp. Dudhalia

[NOTE.—Reference to Pudu-khipa as co-regent with Dudhalia.]

'(um ma) ta ba-ar-na I du-ud-ha-li-ia ŠARRW-RABÛ ŠAR
MAT (ALU ḪATTI)

— — su sa I su -ub-li-hu-li-um-ma sarru rabu ŠAR MÂT ALU
ḫatti

ZÊRU Š(A ḫa-at-tu-si-li šar alu ku-uš šar)

— — ameltu Pu-du-hi-pa ŠARRATU RABÎTU ŠARRAT
MÂT ALU ḫatti.'

Extract VIII, p. 28

Temp. Dudhalia

'This tablet is (written) by Nerikka-Šamši, the King's son, and (.)-officers, by, the King of Tešub-tašša, Ini-Tešub, King of Kargamis, Up-pa-ra-a-a, son of the King of PA. AMELU. MES- is ḪURASU of N.N. . . . UR. MAḪ AMELU-is RAB DUPSARRÛTI Kam(?)—ma-li-ia dup-sar Ši-pa AMELU dupsar A-nu-wa-ILU (an?)—za dup-sar of the city of Nerig'*

* Compare the name of the King of Hamath under Tiglath-Pilezer III.

*Extract XXII, p. 44**Amorite Treaty between Dudhalia and Shabilis, or Edict of
Dudhalia concerning Amurri*

‘When Mutallu, the brother of the father of the Sun (that is to say, Dudhalia), was king, the people of Amurri they were vassals of the King of Egypt the brother of the father of the Sun, Mutallu, and the King of Egypt the people of Amurri Mutallu and he set up Sha-bi-lin (accusative) as King in Amurri.’

*Extract XXIII, p. 45**Amorite Treaty between Dudhalia and Shabilis, or Edict of
Dudhalia concerning Amurri*

‘When Mutallu, the brother of the father of the Sun, was dead, then the father of the Sun, Hattusil, became king. And he deposed Shabilis, and made thy father, Banti-shinni, king in Amurri.’

*Extract IX, p. 29**Temp. Arnuaanta**Fragment of an Edict with the name of Arnuaanta, and that of his
mother, the latter obliterated*

‘(. . . .) Ar-nu-an-ta sarru rabû u name of the queen.’

*Extract X, p. 29**Document of Arnuaanta found on the gateway of the inner wall*

‘(Se)al of the Edict (tabarna) of Arnuaanta, the Great King, son of Du-u(d-ha-li).’

‘(S)eal of the Lady Ta -wa-ash-shi-?, Lady Mu-ni-Dan, Great Queen, ... ? daughter of Du-ud-ha-li-i(a).’

*Extract XIX, p. 41**Temp. ? Fragment of a letter concerning Cyprus*

‘. . . . eru Ud. Ka. Bar alu(?) a-lă-ši-ia-šum Har Sag. Tag-ga-ta-sum.’

‘. . . . copper from Alashia from the mountain of Taggata.’

THE INSCRIBED TOMBS OF EKHMÎM

BY PROFESSOR PERCY E. NEWBERRY

Ekhmîm,* the city of the 'Thunderbolt†'-deity Min, is situated on the right bank of the Nile, about 310 miles south of Cairo. It was the capital of the fertile province of Min, and is one of the oldest towns of Egypt. Here, and in the immediate neighbourhood, Mr. Hugh Whitaker and I spent the greater part of January and February of the present year. From El Ahaîweh‡ opposite El Menshiyeh on the south, to El Sawâmhi on the north, we explored the desert-edge and hills, but the whole district proved to have been thoroughly exhausted by the natives. To the east of El Hawâwish, however, and at the southern end of the limestone hills, we discovered twenty-eight inscribed tombs§ of the Sixth to Twelfth Dynasties, and one untouched burial with three painted wood coffins of the Old Kingdom.

These inscribed tombs are of considerable historic importance; they appear to cover the whole period from the close of the Sixth Dynasty to the end of the first quarter of the Twelfth Dynasty. Among them are five tombs of Great Chieftains of the Ekhmîm nome¶ (Nos. 12, 24, 25, 26 and 27; one is of a Vezier, General, and

* The *Khenti-min* (secular name, *Apw*) of the Ancient Egyptians; the *Shmin* of the Copts.

† In a paper that I published in the *Annals of Archaeology*, Vol. III, pp. 50-52, I suggested that the cult-object of Min consisted of a pair of fossil Cephalopoda, and a remarkable corroboration of this theory is the fact that the limestone hills at the back of Ekhmîm are full of these fossils. When I wrote the paper in 1909 I was not then aware of this fact. Amon, as is now recognised, was another form of Min: his sacred animal was the ram of the Barbary Sheep (*Ovis lervia*) with curved horns. Another kind of fossil Cephalopoda (Ammonites) was known in the 1st Century, A.D., as the Hammonis cornu and was reckoned among the most sacred stones of Ethiopia (Pliny, *Hist. Nat.*, XXXVIII, 60).

‡ We were told by the natives that several hundred Arabs had been robbing this cemetery up to a few days of our arrival there. An important 'find' of Eighteenth Dynasty glass vases had been made early in the winter, and I traced to this locality a number of objects in dealers' hands, which dated from the period between the Old and Middle Kingdoms. I was fortunate in securing from the natives and dealers a collection of some twenty-five 'button'-shaped seals which came from this site.

§ A brief note in which three of these tombs are mentioned, has been printed by Schiaparelli (*Chemmis-Achmim e la sua antica Necropoli* in the *Études Archéologiques, historiques et linguistiques, dédiées à Dr. C. Leemans*, pp. 85-88): Bouriant also refers to this necropolis in *Rec. des travaux*, XI, 142: Mariette has noted the inscription on the lintel of Tomb No. 3 in his *Mons. Divers*, XXI b and p. 6.

¶ Another Great Chieftain of the Min nome is mentioned on a stela in the Cairo Museum (*Cat.* 20024). His name was Antef, born of Buta.

Governor of the Pyramid City (No. 7 *cp.* No. 19); three are of Governors of the New Towns* (Nos. 19, 20 and 21); and six are of Superintendents of the distribution of field-workers (Nos. 2, 5, 13, 15, 19 and 23). The series of priestly titles that occur throw much light on the cult of the local deity. The ordinary priests were *henu neter Min*, with *se-hex* 'instructors'; higher grades were the *Min smā*† and the *Min át*, while the High Priest was apparently the *Min khet*‡. The High Priestess was the *Min hemt*, and there was also a class of priestesses named *Min ursht*, 'watchers.'

Of the personal names occurring in these tombs several are compounded with the name 'Min,' and are, therefore, probably of local origin:—*Min-ankh* (No. 23), *Min-ba-ef* (Coffin No. 1), *Min-em-re-s* (Coffin No. 3), *Min-en-ankh* (No. 22), *Min-neb-ankh* (No. 22), *Min-neferes* (No. 22), *Min-ren* (No. 22), *Min-duat* (No. 21), *Sa-Min* (No. 19), and *Sekhat-Min*§ (No. 4), *Herui* (Nos. 7, 13, 14, 19, and Coffin No. 1) also appears to be local.

The series of names and titles found in these inscribed tombs may be supplemented by the inscriptions on some Old and Middle Kingdom coffins in the Cairo Museum, which have been published by Lacau¶, and are known to have come from the Ekhnâm district. Several of these Cairo coffins must, indeed, have been found at El Hawâwish.

Nos. 28001 and 28004 must have come from Tombs No. 17 and 24 respectively, while Nos. 28002, 28012, and 28018 were probably found in Tombs No. 18, 12 and 5.

* This title occurs at Tehneh (*Annales du Service*, III, 127), and at Sheikh Said (Davies, *Sheikh Said*, pls. IV, VI, IX, XIX); cf. also my *Beni Hasan*, I, p. 60, n. 2.

† Schaefer's reading of this title (Sethe's *Untersuchungen*, IV, 63) is supported by the writing in Tomb No. 3.

‡ On these *khet*-priests, see my papers in the *Annals of Archaeology*, I, p. 27; II, p. 49; and III, p. 50.

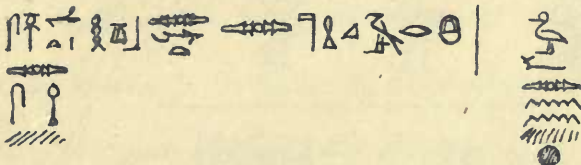
§ *Cp.* the name *Sekhat-sen* (?) in Davies' *Dér el Gebrâwi*, I, pl. XXIII, p. 26.

¶ Lacau, *Sarcophages antérieurs au nouvel empire*, in the *Catalogue général des Antiquités égyptiennes du Musée du Caire*.

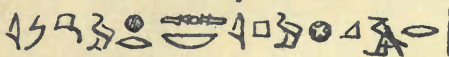
1. Tomb of the - 0

Small rectangular chamber with three slanting pits in floor. Drum lintel. Painting badly preserved but of good quality.

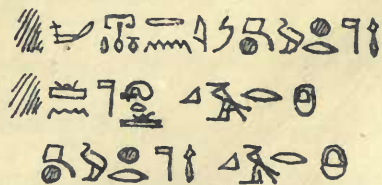
On the left-hand wall is (1) a scene showing officers bringing up offerings of cattle to Qar, his wife and their son, who are represented standing:-



In the centre of the wall is a sculptured false-door painted to represent red granite. On the left jamb is preserved:-



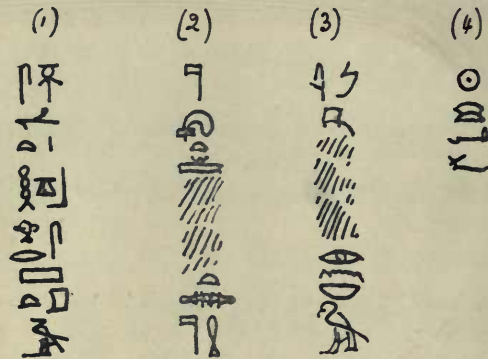
On the right-hand side of the wall is a figure of Qar seated:-



On the inner wall is an inscription along the frieze in hieroglyphs outlined red:             .

Below this frieze inscription is a figure of Qar standing

clad in the robe of the High Priest of Min with two men standing facing him :-



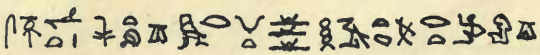
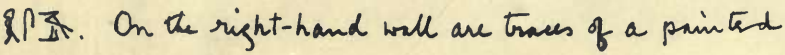
(2) Tomb of

Rectangular chamber, $7\frac{1}{2}$ m. $\times$ 4 m., with projecting pilaster in centre of inner wall. Large sloping pit in middle of floor. Drum lintel. On the inner face of outside wall to left of entrance are the remains of a scene of beer-making and flax thrashing.

On the left-hand wall is (1) a scene of cattle inspecting: Gahesa is here clad in his High Priestly robes, and (2) a scene showing Gahesa seated before an altar :-

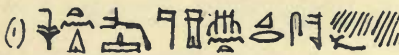
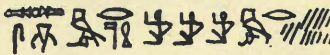


On the inner wall is painted a false-door with Gahesa standing before an altar :-

Following this is another portrait of Gahesa in his priestly robes :-  . On the right-hand wall are traces of a painted scene of boats.

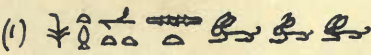
(3) Tomb of the (name destroyed).

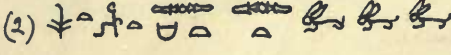
Large rectangular tomb with well cut inscription over lintel of doorway. No traces of paintings or inscriptions inside. The inscription on the lintel reads :-

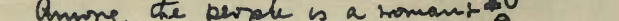
(1)  (2) 

(4) Tomb of the

Small rectangular chamber with drum lintel to doorway and sloping mummy pit in floor. Remains of painting on inner wall.

On the left-hand side of inner wall are remains of a painted false door with inscriptions on left jamb alone preserved :- (1) 

(2) 

To the right of this false door is a procession of people bringing offerings: -  Among the people is a woman .

(5) Tomb of the 皇極天皇

Small rectangular chamber with drum lined and sloping pit. Fragments of painted inscriptions on inner wall. Owner:-

wife:- son:-

(6) Tomb of 孝宣皇帝.

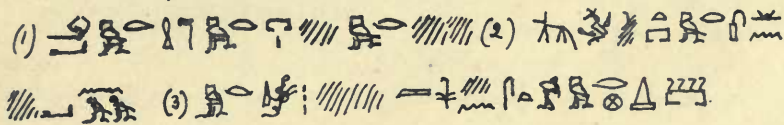
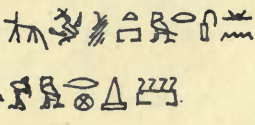
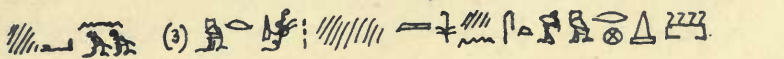
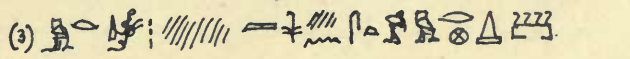
Small rectangular chamber with pillar in centre, and two sloping pits in floor. On the left-hand wall are the remains of a scene of animals in the desert with legends.

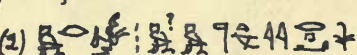
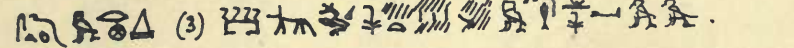
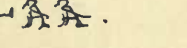
[illegible]

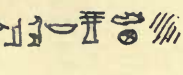
(7). Tomb of the .

Two small rectangular chambers with portico of five square pillars tapering upwards. The two northernmost pillars are inscribed with incised hieroglyphs.

On the outer face of the left-hand pillar is a figure of the vizier standing with a man offering a joint before him:—

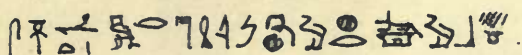
(1)  (2) 
 (3) 

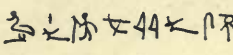
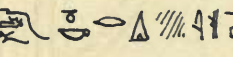
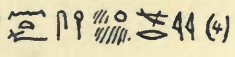
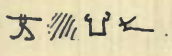
On the right hand face of the same column are incised figures of the vizier & a woman facing one another:— (1) 
 (2) 
 (3) 

On the outer face of the next column of the portico is incised a figure of the vizier with abas:— 

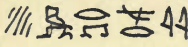
(8). Tomb of the .

Small rectangular chamber with plain doorway and incised inscription:—

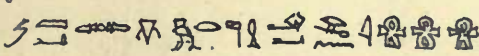


front of a table of offerings: on the other side of the table stands his son who offers the haunch of an ox: above him are four vertical lines of hieroglyphs:— (1)  (2)  (3)  (4) 
.

To the right is a list of offerings with the offerings figured.

On the inner wall is a painted false door with only the name and title  preserved upon it.

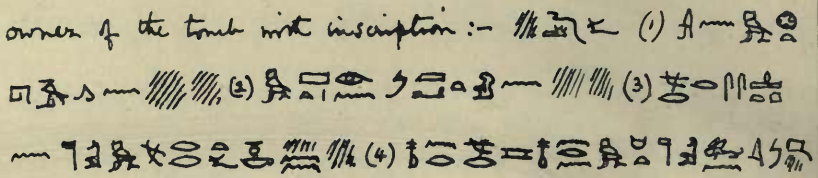
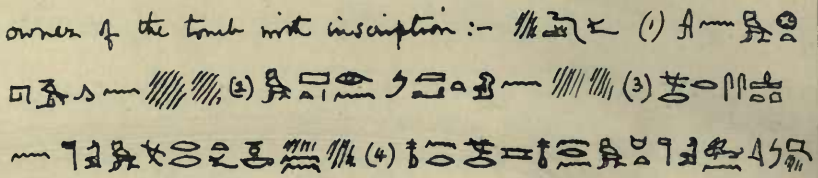
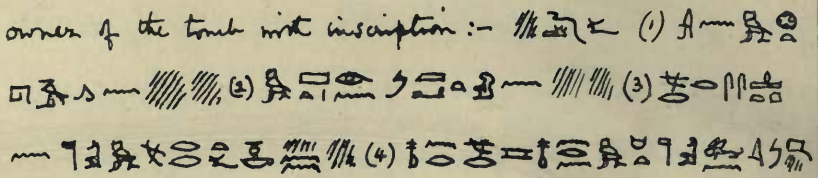
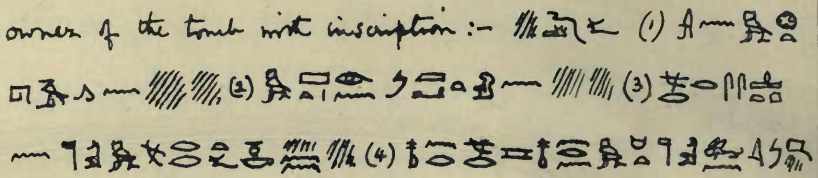
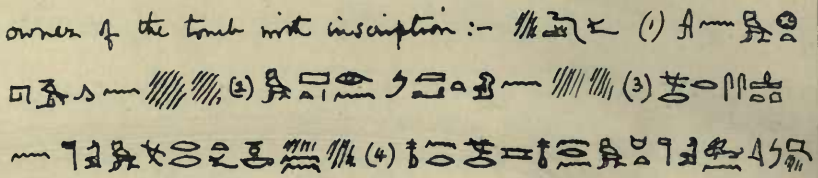
(10) Tomb of the

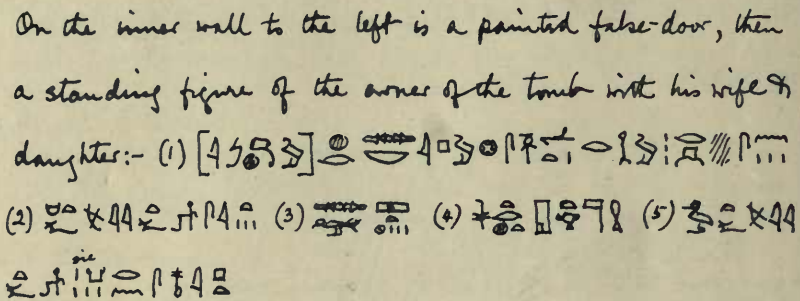
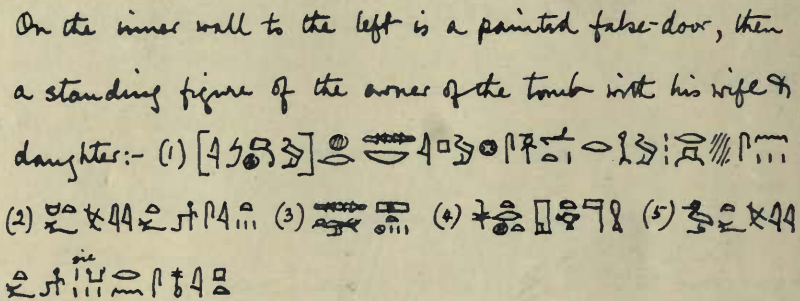
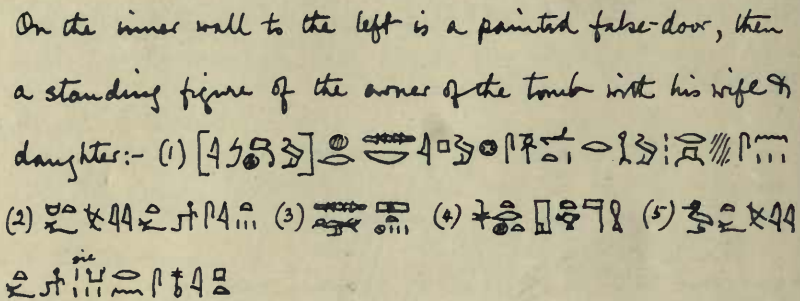
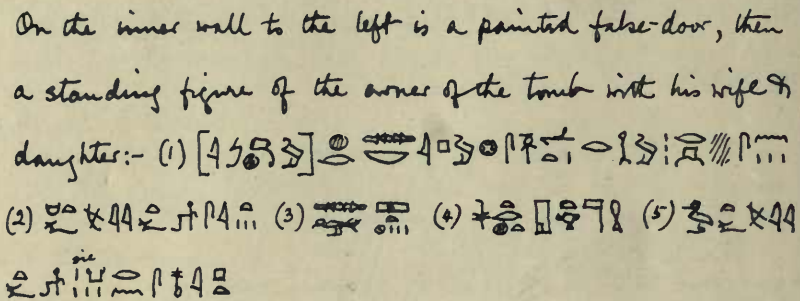
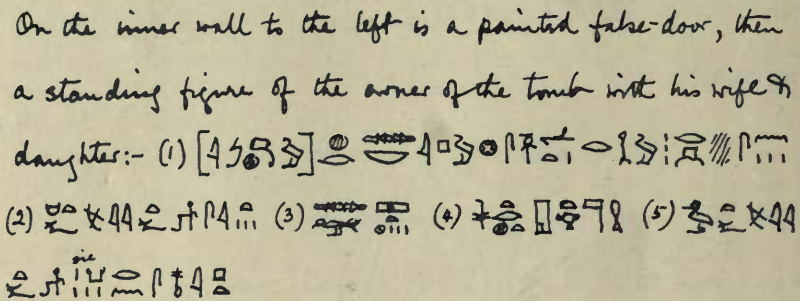
Small rectangular chamber with two pillars; drum lintel; and one sloping pit. Fragmentary painted inscriptions give only the name and titles of the owner:— 


(11) Tomb of the

Small rectangular tomb with sloping passage to sarcophagus chamber. Drum lintel. Painting of medium quality badly preserved.

On the left-hand side of left wall is (1) a procession of servants bearing offerings, then (2) a seated figure of the

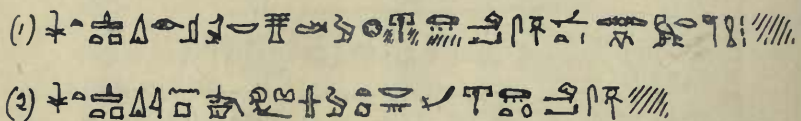
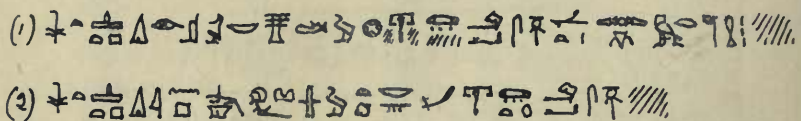
owner of the tomb with inscription :-  (1)  (2)  (3)  (4) 

On the inner wall to the left is a painted false-door, then a standing figure of the owner of the tomb with his wife & daughters :- (1)  (2)  (3)  (4)  (5) 

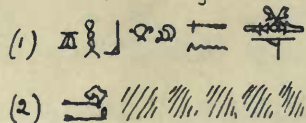
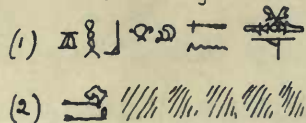
(12) Tomb of the .

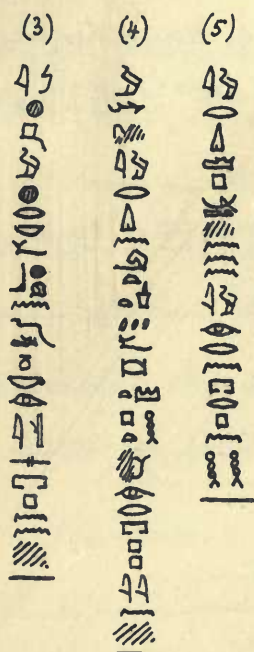
Small rectangular two-pillared chamber with two slanting pits in floor. Drum lintel. Inscriptions painted on reddish-brown plaster, poor in style and hacked out in places.

On the architrave to pillars are two inscriptions :-

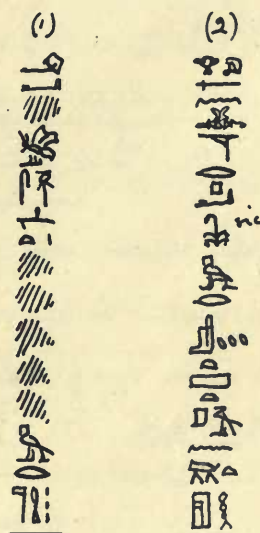
- (1)  (2) 

On the left-hand pillar are two horizontal and three vertical lines of hieroglyphs :-

- (1)  (2) 



On the right-hand pillar are two vertical lines of hieroglyphs:-



(13) Tomb of the 𓆎𓅓𓏏𓏏

Small rectangular chamber with shrine in inner wall. Drum lintels over doorway and entrance to shrine. One large vertical pit on right of main chamber and one sloping pit on left. False-door with sculptured table of offerings on left wall of shrine. Painting, poor and much destroyed. On left-hand wall is a scene of inspection of cattle:- (1) 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏. (2) 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏 𓆎𓅓𓏏𓏏.

On the left inner wall is a standing figure of Herui as High Priest of Min.

On the right inner wall is a figure of Herui standing and receiving offerings :- 𐀀𐀁𐀂𐀃𐀄𐀅𐀆𐀇𐀈𐀉𐀊𐀋𐀌𐀍𐀎𐀏𐀐𐀑𐀒𐀓𐀔𐀕𐀖𐀗𐀘𐀙𐀚𐀛𐀜𐀝𐀞𐀟𐀠𐀡𐀢𐀣𐀤𐀥𐀦𐀧𐀨𐀩𐀪𐀫𐀬𐀭𐀮𐀯𐀰𐀱𐀲𐀳𐀴𐀵𐀶𐀷𐀸𐀹𐀺𐀻𐀼𐀽𐀾𐀿𐁀𐁁𐁂𐁃𐁄𐁅𐁆𐁇𐁈𐁉𐁊𐁋𐁌𐁍𐁎𐁏𐁐𐁑𐁒𐁓𐁔𐁕𐁖𐁗𐁘𐁙𐁚𐁛𐁜𐁝𐁞𐁟𐁠𐁡𐁢𐁣𐁤𐁥𐁦𐁧𐁨𐁩𐁪𐁫𐁬𐁭𐁮𐁯𐁰𐁱𐁲𐁳𐁴𐁵𐁶𐁷𐁸𐁹𐁺𐁻𐁼𐁽𐁾𐁿𐂀𐂁𐂂𐂃𐂄𐂅𐂆𐂇𐂈𐂉𐂊𐂋𐂌𐂍𐂎𐂏𐂐𐂑𐂒𐂓𐂔𐂕𐂖𐂗𐂘𐂙𐂚𐂛𐂜𐂝𐂞𐂟𐂠𐂡𐂢𐂣𐂤𐂥𐂦𐂧𐂨𐂩𐂪𐂫𐂬𐂭𐂮𐂯𐂰𐂱𐂲𐂳𐂴𐂵𐂶𐂷𐂸𐂹𐂺𐂻𐂼𐂽𐂾𐂿𐃀𐃁𐃂𐃃𐃄𐃅𐃆𐃇𐃈𐃉𐃊𐃋𐃌𐃍𐃎𐃏𐃐𐃑𐃒𐃓𐃔𐃕𐃖𐃗𐃘𐃙𐃚𐃛𐃜𐃝𐃞𐃟𐃠𐃡𐃢𐃣𐃤𐃥𐃦𐃧𐃨𐃩𐃪𐃫𐃬𐃭𐃮𐃯𐃰𐃱𐃲𐃳𐃴𐃵𐃶𐃷𐃸𐃹𐃺𐃻𐃼𐃽𐃾𐃿𐄀𐄁𐄂𐄃𐄄𐄅𐄆𐄇𐄈𐄉𐄊𐄋𐄌𐄍𐄎𐄏𐄐𐄑𐄒𐄓𐄔𐄕𐄖𐄗𐄘𐄙𐄚𐄛𐄜𐄝𐄞𐄟𐄠𐄡𐄢𐄣𐄤𐄥𐄦𐄧𐄨𐄩𐄪𐄫𐄬𐄭𐄮𐄯𐄰𐄱𐄲𐄳𐄴𐄵𐄶𐄷𐄸𐄹𐄺𐄻𐄼𐄽𐄾𐄿𐅀𐅁𐅂𐅃𐅄𐅅𐅆𐅇𐅈𐅉𐅊𐅋𐅌𐅍𐅎𐅏𐅐𐅑𐅒𐅓𐅔𐅕𐅖𐅗𐅘𐅙𐅚𐅛𐅜𐅝𐅞𐅟𐅠𐅡𐅢𐅣𐅤𐅥𐅦𐅧𐅨𐅩𐅪𐅫𐅬𐅭𐅮𐅯𐅰𐅱𐅲𐅳𐅴𐅵𐅶𐅷𐅸𐅹𐅺𐅻𐅼𐅽𐅾𐅿𐆀𐆁𐆂𐆃𐆄𐆅𐆆𐆇𐆈𐆉𐆊𐆋𐆌𐆍𐆎𐆏𐆐𐆑𐆒𐆓𐆔𐆕𐆖𐆗𐆘𐆙𐆚𐆛𐆜𐆝𐆞𐆟𐆠𐆡𐆢𐆣𐆤𐆥𐆦𐆧𐆨𐆩𐆪𐆫𐆬𐆭𐆮𐆯𐆰𐆱𐆲𐆳𐆴𐆵𐆶𐆷𐆸𐆹𐆺𐆻𐆼𐆽𐆾𐆿𐇀𐇁𐇂𐇃𐇄𐇅𐇆𐇇𐇈𐇉𐇊𐇋𐇌𐇍𐇎𐇏𐇐𐇑𐇒𐇓𐇔𐇕𐇖𐇗𐇘𐇙𐇚𐇛𐇜𐇝𐇞𐇟𐇠𐇡𐇢𐇣𐇤𐇥𐇦𐇧𐇨𐇩𐇪𐇫𐇬𐇭𐇮𐇯𐇰𐇱𐇲𐇳𐇴𐇵𐇶𐇷𐇸𐇹𐇺𐇻𐇼𐇽𐇾𐇿𐈀𐈁𐈂𐈃𐈄𐈅𐈆𐈇𐈈𐈉𐈊𐈋𐈌𐈍𐈎𐈏𐈐𐈑𐈒𐈓𐈔𐈕𐈖𐈗𐈘𐈙𐈚𐈛𐈜𐈝𐈞𐈟𐈠𐈡𐈢𐈣𐈤𐈥𐈦𐈧𐈨𐈩𐈪𐈫𐈬𐈭𐈮𐈯𐈰𐈱𐈲𐈳𐈴𐈵𐈶𐈷𐈸𐈹𐈺𐈻𐈼𐈽𐈾𐈿𐉀𐉁𐉂𐉃𐉄𐉅𐉆𐉇𐉈𐉉𐉊𐉋𐉌𐉍𐉎𐉏𐉐𐉑𐉒𐉓𐉔𐉕𐉖𐉗𐉘𐉙𐉚𐉛𐉜𐉝𐉞𐉟𐉠𐉡𐉢𐉣𐉤𐉥𐉦𐉧𐉨𐉩𐉪𐉫𐉬𐉭𐉮𐉯𐉰𐉱𐉲𐉳𐉴𐉵𐉶𐉷𐉸𐉹𐉺𐉻𐉼𐉽𐉾𐉿𐊀𐊁𐊂𐊃𐊄𐊅𐊆𐊇𐊈𐊉𐊊𐊋𐊌𐊍𐊎𐊏𐊐𐊑𐊒𐊓𐊔𐊕𐊖𐊗𐊘𐊙𐊚𐊛𐊜𐊝𐊞𐊟𐊠𐊡𐊢𐊣𐊤𐊥𐊦𐊧𐊨𐊩𐊪𐊫𐊬𐊭𐊮𐊯𐊰𐊱𐊲𐊳𐊴𐊵𐊶𐊷𐊸𐊹𐊺𐊻𐊼𐊽𐊾𐊿𐋀𐋁𐋂𐋃𐋄𐋅𐋆𐋇𐋈𐋉𐋊𐋋𐋌𐋍𐋎𐋏𐋐𐋑𐋒𐋓𐋔𐋕𐋖𐋗𐋘𐋙𐋚𐋛𐋜𐋝𐋞𐋟𐋠𐋡𐋢𐋣𐋤𐋥𐋦𐋧𐋨𐋩𐋪𐋫𐋬𐋭𐋮𐋯𐋰𐋱𐋲𐋳𐋴𐋵𐋶𐋷𐋸𐋹𐋺𐋻𐋼𐋽𐋾𐋿𐌀𐌁𐌂𐌃𐌄𐌅𐌆𐌇𐌈𐌉𐌊𐌋𐌌𐌍𐌎𐌏𐌐𐌑𐌒𐌓𐌔𐌕𐌖𐌗𐌘𐌙𐌚𐌛𐌜𐌝𐌞𐌟𐌠𐌡𐌢𐌣𐌤𐌥𐌦𐌧𐌨𐌩𐌪𐌫𐌬𐌭𐌮𐌯𐌰𐌱𐌲𐌳𐌴𐌵𐌶𐌷𐌸𐌹𐌺𐌻𐌼𐌽𐌾𐌿𐍀𐍁𐍂𐍃𐍄𐍅𐍆𐍇𐍈𐍉𐍊𐍋𐍌𐍍𐍎𐍏𐍐𐍑𐍒𐍓𐍔𐍕𐍖𐍗𐍘𐍙𐍚𐍛𐍜𐍝𐍞𐍟𐍠𐍡𐍢𐍣𐍤𐍥𐍦𐍧𐍨𐍩𐍪𐍫𐍬𐍭𐍮𐍯𐍰𐍱𐍲𐍳𐍴𐍵𐍶𐍷𐍸𐍹𐍺𐍻𐍼𐍽𐍾𐍿𐎀𐎁𐎂𐎃𐎄𐎅𐎆𐎇𐎈𐎉𐎊𐎋𐎌𐎍𐎎𐎏𐎐𐎑𐎒𐎓𐎔𐎕𐎖𐎗𐎘𐎙𐎚𐎛𐎜𐎝𐎞𐎟𐎠𐎡𐎢𐎣𐎤𐎥𐎦𐎧𐎨𐎩𐎪𐎫𐎬𐎭𐎮𐎯𐎰𐎱𐎲𐎳𐎴𐎵𐎶𐎷𐎸𐎹𐎺𐎻𐎼𐎽𐎾𐎿𐏀𐏁𐏂𐏃𐏄𐏅𐏆𐏇𐏈𐏉𐏊𐏋𐏌𐏍𐏎𐏏𐏐𐏑𐏒𐏓𐏔𐏕𐏖𐏗𐏘𐏙𐏚𐏛𐏜𐏝𐏞𐏟𐏠𐏡𐏢𐏣𐏤𐏥𐏦𐏧𐏨𐏩𐏪𐏫𐏬𐏭𐏮𐏯𐏰𐏱𐏲𐏳𐏴𐏵𐏶𐏷𐏸𐏹𐏺𐏻𐏼𐏽𐏾𐏿𐐀𐐁𐐂𐐃𐐄𐐅𐐆𐐇𐐈𐐉𐐊𐐋𐐌𐐍𐐎𐐏𐐐𐐑𐐒𐐓𐐔𐐕𐐖𐐗𐐘𐐙𐐚𐐛𐐜𐐝𐐞𐐟𐐠𐐡𐐢𐐣𐐤𐐥𐐦𐐧𐐨𐐩𐐪𐐫𐐬𐐭𐐮𐐯𐐰𐐱𐐲𐐳𐐴𐐵𐐶𐐷𐐸𐐹𐐺𐐻𐐼𐐽𐐾𐐿𐑀𐑁𐑂𐑃𐑄𐑅𐑆𐑇𐑈𐑉𐑊𐑋𐑌𐑍𐑎𐑏𐑐𐑑𐑒𐑓𐑔𐑕𐑖𐑗𐑘𐑙𐑚𐑛𐑜𐑝𐑞𐑟𐑠𐑡𐑢𐑣𐑤𐑥𐑦𐑧𐑨𐑩𐑪𐑫𐑬𐑭𐑮𐑯𐑰𐑱𐑲𐑳𐑴𐑵𐑶𐑷𐑸𐑹𐑺𐑻𐑼𐑽𐑾𐑿𐒀𐒁𐒂𐒃𐒄𐒅𐒆𐒇𐒈𐒉𐒊𐒋𐒌𐒍𐒎𐒏𐒐𐒑𐒒𐒓𐒔𐒕𐒖𐒗𐒘𐒙𐒚𐒛𐒜𐒝𐒞𐒟𐒠𐒡𐒢𐒣𐒤𐒥𐒦𐒧𐒨𐒩𐒪𐒫𐒬𐒭𐒮𐒯𐒰𐒱𐒲𐒳𐒴𐒵𐒶𐒷𐒸𐒹𐒺𐒻𐒼𐒽𐒾𐒿𐓀𐓁𐓂𐓃𐓄𐓅𐓆𐓇𐓈𐓉𐓊𐓋𐓌𐓍𐓎𐓏𐓐𐓑𐓒𐓓𐓔𐓕𐓖𐓗𐓘𐓙𐓚𐓛𐓜𐓝𐓞𐓟𐓠𐓡𐓢𐓣𐓤𐓥𐓦𐓧𐓨𐓩𐓪𐓫𐓬𐓭𐓮𐓯𐓰𐓱𐓲𐓳𐓴𐓵𐓶𐓷𐓸𐓹𐓺𐓻𐓼𐓽𐓾𐓿𐔀𐔁𐔂𐔃𐔄𐔅𐔆𐔇𐔈𐔉𐔊𐔋𐔌𐔍𐔎𐔏𐔐𐔑𐔒𐔓𐔔𐔕𐔖𐔗𐔘𐔙𐔚𐔛𐔜𐔝𐔞𐔟𐔠𐔡𐔢𐔣𐔤𐔥𐔦𐔧𐔨𐔩𐔪𐔫𐔬𐔭𐔮𐔯𐔰𐔱𐔲𐔳𐔴𐔵𐔶𐔷𐔸𐔹𐔺𐔻𐔼𐔽𐔾𐔿𐕀𐕁𐕂𐕃𐕄𐕅𐕆𐕇𐕈𐕉𐕊𐕋𐕌𐕍𐕎𐕏𐕐𐕑𐕒𐕓𐕔𐕕𐕖𐕗𐕘𐕙𐕚𐕛𐕜𐕝𐕞𐕟𐕠𐕡𐕢𐕣𐕤𐕥𐕦𐕧𐕨𐕩𐕪𐕫𐕬𐕭𐕮𐕯𐕰𐕱𐕲𐕳𐕴𐕵𐕶𐕷𐕸𐕹𐕺𐕻𐕼𐕽𐕾𐕿𐖀𐖁𐖂𐖃𐖄𐖅𐖆𐖇𐖈𐖉𐖊𐖋𐖌𐖍𐖎𐖏𐖐𐖑𐖒𐖓𐖔𐖕𐖖𐖗𐖘𐖙𐖚𐖛𐖜𐖝𐖞𐖟𐖠𐖡𐖢𐖣𐖤𐖥𐖦𐖧𐖨𐖩𐖪𐖫𐖬𐖭𐖮𐖯𐖰𐖱𐖲𐖳𐖴𐖵𐖶𐖷𐖸𐖹𐖺𐖻𐖼𐖽𐖾𐖿𐗀𐗁𐗂𐗃𐗄𐗅𐗆𐗇𐗈𐗉𐗊𐗋𐗌𐗍𐗎𐗏𐗐𐗑𐗒𐗓𐗔𐗕𐗖𐗗𐗘𐗙𐗚𐗛𐗜𐗝𐗞𐗟𐗠𐗡𐗢𐗣𐗤𐗥𐗦𐗧𐗨𐗩𐗪𐗫𐗬𐗭𐗮𐗯𐗰𐗱𐗲𐗳𐗴𐗵𐗶𐗷𐗸𐗹𐗺𐗻𐗼𐗽𐗾𐗿𐘀𐘁𐘂𐘃𐘄𐘅𐘆𐘇𐘈𐘉𐘊𐘋𐘌𐘍𐘎𐘏𐘐𐘑𐘒𐘓𐘔𐘕𐘖𐘗𐘘𐘙𐘚𐘛𐘜𐘝𐘞𐘟𐘠𐘡𐘢𐘣𐘤𐘥𐘦𐘧𐘨𐘩𐘪𐘫𐘬𐘭𐘮𐘯𐘰𐘱𐘲𐘳𐘴𐘵𐘶𐘷𐘸𐘹𐘺𐘻𐘼𐘽𐘾𐘿𐙀𐙁𐙂𐙃𐙄𐙅𐙆𐙇𐙈𐙉𐙊𐙋𐙌𐙍𐙎𐙏𐙐𐙑𐙒𐙓𐙔𐙕𐙖𐙗𐙘𐙙𐙚𐙛𐙜𐙝𐙞𐙟𐙠𐙡𐙢𐙣𐙤𐙥𐙦𐙧𐙨𐙩𐙪𐙫𐙬𐙭𐙮𐙯𐙰𐙱𐙲𐙳𐙴𐙵𐙶𐙷𐙸𐙹𐙺𐙻𐙼𐙽𐙾𐙿𐚀𐚁𐚂𐚃𐚄𐚅𐚆𐚇𐚈𐚉𐚊𐚋𐚌𐚍𐚎𐚏𐚐𐚑𐚒𐚓𐚔𐚕𐚖𐚗𐚘𐚙𐚚𐚛𐚜𐚝𐚞𐚟𐚠𐚡𐚢𐚣𐚤𐚥𐚦𐚧𐚨𐚩𐚪𐚫𐚬𐚭𐚮𐚯𐚰𐚱𐚲𐚳𐚴𐚵𐚶𐚷𐚸𐚹𐚺𐚻𐚼𐚽𐚾𐚿𐛀𐛁𐛂𐛃𐛄𐛅𐛆𐛇𐛈𐛉𐛊𐛋𐛌𐛍𐛎𐛏𐛐𐛑𐛒𐛓𐛔𐛕𐛖𐛗𐛘𐛙𐛚𐛛𐛜𐛝𐛞𐛟𐛠𐛡𐛢𐛣𐛤𐛥𐛦𐛧𐛨𐛩𐛪𐛫𐛬𐛭𐛮𐛯𐛰𐛱𐛲𐛳𐛴𐛵𐛶𐛷𐛸𐛹𐛺𐛻𐛼𐛽𐛾𐛿𐜀𐜁𐜂𐜃𐜄𐜅𐜆𐜇𐜈𐜉𐜊𐜋𐜌𐜍𐜎𐜏𐜐𐜑𐜒𐜓𐜔𐜕𐜖𐜗𐜘𐜙𐜚𐜛𐜜𐜝𐜞𐜟𐜠𐜡𐜢𐜣𐜤𐜥𐜦𐜧𐜨𐜩𐜪𐜫𐜬𐜭𐜮𐜯𐜰𐜱𐜲𐜳𐜴𐜵𐜶𐜷𐜸𐜹𐜺𐜻𐜼𐜽𐜾𐜿𐝀𐝁𐝂𐝃𐝄𐝅𐝆𐝇𐝈𐝉𐝊𐝋𐝌𐝍𐝎𐝏𐝐𐝑𐝒𐝓𐝔𐝕𐝖𐝗𐝘𐝙𐝚𐝛𐝜𐝝𐝞𐝟𐝠𐝡𐝢𐝣𐝤𐝥𐝦𐝧𐝨𐝩𐝪𐝫𐝬𐝭𐝮𐝯𐝰𐝱𐝲𐝳𐝴𐝵𐝶𐝷𐝸𐝹𐝺𐝻𐝼𐝽𐝾𐝿𐞀𐞁𐞂𐞃𐞄𐞅𐞆𐞇𐞈𐞉𐞊𐞋𐞌𐞍𐞎𐞏𐞐𐞑𐞒𐞓𐞔𐞕𐞖𐞗𐞘𐞙𐞚𐞛𐞜𐞝𐞞𐞟𐞠𐞡𐞢𐞣𐞤𐞥𐞦𐞧𐞨𐞩𐞪𐞫𐞬𐞭𐞮𐞯𐞰𐞱𐞲𐞳𐞴𐞵𐞶𐞷𐞸𐞹𐞺𐞻𐞼𐞽𐞾𐞿𐟀𐟁𐟂𐟃𐟄𐟅𐟆𐟇𐟈𐟉𐟊𐟋𐟌𐟍𐟎𐟏𐟐𐟑𐟒𐟓𐟔𐟕𐟖𐟗𐟘𐟙𐟚𐟛𐟜𐟝𐟞𐟟𐟠𐟡𐟢𐟣𐟤𐟥𐟦𐟧𐟨𐟩𐟪𐟫𐟬𐟭𐟮𐟯𐟰𐟱𐟲𐟳𐟴𐟵𐟶𐟷𐟸𐟹𐟺𐟻𐟼𐟽𐟾𐟿𐠀𐠁𐠂𐠃𐠄𐠅𐠆𐠇𐠈𐠉𐠊𐠋𐠌𐠍𐠎𐠏𐠐𐠑𐠒𐠓𐠔𐠕𐠖𐠗𐠘𐠙𐠚𐠛𐠜𐠝𐠞𐠟𐠠𐠡𐠢𐠣𐠤𐠥𐠦𐠧𐠨𐠩𐠪𐠫𐠬𐠭𐠮𐠯𐠰𐠱𐠲𐠳𐠴𐠵𐠶𐠷𐠸𐠹𐠺𐠻𐠼𐠽𐠾𐠿𐡀𐡁𐡂𐡃𐡄𐡅𐡆𐡇𐡈𐡉𐡊𐡋𐡌𐡍𐡎𐡏𐡐𐡑𐡒𐡓𐡔𐡕𐡖𐡗𐡘𐡙𐡚𐡛𐡜𐡝𐡞𐡟𐡠𐡡𐡢𐡣𐡤𐡥𐡦𐡧𐡨𐡩𐡪𐡫𐡬𐡭𐡮𐡯𐡰𐡱𐡲𐡳𐡴𐡵𐡶𐡷𐡸𐡹𐡺𐡻𐡼𐡽𐡾𐡿𐢀𐢁𐢂𐢃𐢄𐢅𐢆𐢇𐢈𐢉𐢊𐢋𐢌𐢍𐢎𐢏𐢐𐢑𐢒𐢓𐢔𐢕𐢖𐢗𐢘𐢙𐢚𐢛𐢜𐢝𐢞𐢟𐢠𐢡𐢢𐢣𐢤𐢥𐢦𐢧𐢨𐢩𐢪𐢫𐢬𐢭𐢮𐢯𐢰𐢱𐢲𐢳𐢴𐢵𐢶𐢷𐢸𐢹𐢺𐢻𐢼𐢽𐢾𐢿𐣀𐣁𐣂𐣃𐣄𐣅𐣆𐣇𐣈𐣉𐣊𐣋𐣌𐣍𐣎𐣏𐣐𐣑𐣒𐣓𐣔𐣕𐣖𐣗𐣘𐣙𐣚𐣛𐣜𐣝𐣞𐣟𐣠𐣡𐣢𐣣𐣤𐣥𐣦𐣧𐣨𐣩𐣪𐣫𐣬𐣭𐣮𐣯𐣰𐣱𐣲𐣳𐣴𐣵𐣶𐣷𐣸𐣹𐣺𐣻𐣼𐣽𐣾𐣿𐤀𐤁𐤂𐤃𐤄𐤅𐤆𐤇𐤈𐤉𐤊𐤋𐤌𐤍𐤎𐤏𐤐𐤑𐤒𐤓𐤔𐤕𐤖𐤗𐤘𐤙𐤚𐤛𐤜𐤝𐤞𐤟𐤠𐤡𐤢𐤣𐤤𐤥𐤦𐤧𐤨𐤩𐤪𐤫𐤬𐤭𐤮𐤯𐤰𐤱𐤲𐤳𐤴𐤵𐤶𐤷𐤸𐤹𐤺𐤻𐤼𐤽𐤾𐤿𐥀𐥁𐥂𐥃𐥄𐥅𐥆𐥇𐥈𐥉𐥊𐥋𐥌𐥍𐥎𐥏𐥐𐥑𐥒𐥓𐥔𐥕𐥖𐥗𐥘𐥙𐥚𐥛𐥜𐥝𐥞𐥟𐥠𐥡𐥢𐥣𐥤𐥥𐥦𐥧𐥨𐥩𐥪𐥫𐥬𐥭𐥮𐥯𐥰𐥱𐥲𐥳𐥴𐥵𐥶𐥷𐥸𐥹𐥺𐥻𐥼𐥽𐥾𐥿𐦀𐦁𐦂𐦃𐦄𐦅𐦆𐦇𐦈𐦉𐦊𐦋𐦌𐦍𐦎𐦏𐦐𐦑𐦒𐦓𐦔𐦕𐦖𐦗𐦘𐦙𐦚𐦛𐦜𐦝𐦞𐦟𐦠𐦡𐦢𐦣𐦤𐦥𐦦𐦧𐦨𐦩𐦪𐦫𐦬𐦭𐦮𐦯𐦰𐦱𐦲𐦳𐦴𐦵𐦶𐦷𐦸𐦹𐦺𐦻𐦼𐦽𐦾𐦿𐧀𐧁𐧂𐧃𐧄𐧅𐧆𐧇𐧈𐧉𐧊𐧋𐧌𐧍𐧎𐧏𐧐𐧑𐧒𐧓𐧔𐧕𐧖𐧗𐧘𐧙𐧚𐧛𐧜𐧝𐧞𐧟𐧠𐧡𐧢𐧣𐧤𐧥𐧦𐧧𐧨𐧩𐧪𐧫𐧬𐧭𐧮𐧯𐧰𐧱𐧲𐧳𐧴𐧵𐧶𐧷𐧸𐧹𐧺𐧻𐧼𐧽𐧾𐧿𐨀𐨁𐨂𐨃𐨄𐨅𐨆𐨇𐨈𐨉𐨊𐨋𐨌𐨍𐨎𐨏𐨐𐨑𐨒𐨓𐨔𐨕𐨖𐨗𐨘𐨙𐨚𐨛𐨜𐨝𐨞𐨟𐨠𐨡𐨢𐨣𐨤𐨥𐨦𐨧𐨨𐨩𐨪𐨫𐨬𐨭𐨮𐨯𐨰𐨱𐨲𐨳𐨴𐨵𐨶𐨷𐨹𐨺𐨸𐨻𐨼𐨽𐨾𐨿𐩀𐩁𐩂𐩃𐩄𐩅𐩆𐩇𐩈𐩉𐩊𐩋𐩌𐩍𐩎𐩏𐩐𐩑𐩒𐩓𐩔𐩕𐩖𐩗𐩘𐩙𐩚𐩛𐩜𐩝𐩞𐩟𐩠𐩡𐩢𐩣𐩤𐩥𐩦𐩧𐩨𐩩𐩪𐩫𐩬𐩭𐩮𐩯𐩰𐩱𐩲𐩳𐩴𐩵𐩶𐩷𐩸𐩹𐩺𐩻𐩼𐩽𐩾𐩿𐪀𐪁𐪂𐪃𐪄𐪅𐪆𐪇𐪈𐪉𐪊𐪋𐪌𐪍𐪎𐪏𐪐𐪑𐪒𐪓𐪔𐪕𐪖𐪗𐪘𐪙𐪚𐪛𐪜𐪝𐪞𐪟𐪠𐪡𐪢𐪣𐪤𐪥𐪦𐪧𐪨𐪩𐪪𐪫𐪬𐪭𐪮𐪯𐪰𐪱𐪲𐪳𐪴𐪵𐪶𐪷𐪸𐪹𐪺𐪻𐪼𐪽𐪾𐪿𐫀𐫁𐫂𐫃𐫄𐫅𐫆𐫇𐫈𐫉𐫊𐫋𐫌𐫍𐫎𐫏𐫐𐫑𐫒𐫓𐫔𐫕𐫖𐫗𐫘𐫙𐫚𐫛𐫜𐫝𐫞𐫟𐫠𐫡𐫢𐫣𐫤𐫦𐫥𐫧𐫨𐫩𐫪𐫫𐫬𐫭𐫮𐫯𐫰𐫱𐫲𐫳𐫴𐫵𐫶𐫷𐫸𐫹𐫺𐫻𐫼𐫽𐫾𐫿𐬀𐬁𐬂𐬃𐬄𐬅𐬆𐬇𐬈𐬉𐬊𐬋𐬌𐬍𐬎𐬏𐬐𐬑𐬒𐬓𐬔𐬕𐬖𐬗𐬘𐬙𐬚𐬛𐬜𐬝𐬞𐬟𐬠𐬡𐬢𐬣𐬤𐬥𐬦𐬧𐬨𐬩𐬪𐬫𐬬𐬭𐬮𐬯𐬰𐬱𐬲𐬳𐬴𐬵𐬶𐬷𐬸𐬹𐬺𐬻𐬼𐬽𐬾𐬿𐭀𐭁𐭂𐭃𐭄𐭅𐭆𐭇𐭈𐭉𐭊𐭋𐭌𐭍𐭎𐭏𐭐𐭑𐭒𐭓𐭔𐭕𐭖𐭗𐭘𐭙𐭚𐭛𐭜𐭝𐭞𐭟𐭠𐭡𐭢𐭣𐭤𐭥𐭦𐭧𐭨𐭩𐭪𐭫𐭬𐭭𐭮𐭯𐭰𐭱𐭲𐭳𐭴𐭵𐭶𐭷𐭸𐭹𐭺𐭻𐭼𐭽𐭾𐭿𐮀𐮁𐮂𐮃𐮄𐮅𐮆𐮇𐮈𐮉𐮊𐮋𐮌𐮍𐮎𐮏𐮐𐮑𐮒𐮓𐮔𐮕𐮖𐮗𐮘𐮙𐮚𐮛𐮜𐮝𐮞𐮟𐮠𐮡𐮢𐮣𐮤𐮥𐮦𐮧𐮨𐮩𐮪𐮫𐮬𐮭𐮮𐮯𐮰𐮱𐮲𐮳𐮴𐮵𐮶𐮷𐮸𐮹𐮺𐮻𐮼𐮽𐮾𐮿𐯀𐯁𐯂𐯃𐯄𐯅𐯆𐯇𐯈𐯉𐯊𐯋𐯌𐯍𐯎𐯏𐯐𐯑𐯒𐯓𐯔𐯕𐯖𐯗𐯘𐯙𐯚𐯛𐯜𐯝𐯞𐯟𐯠𐯡𐯢𐯣𐯤𐯥𐯦𐯧𐯨𐯩𐯪𐯫𐯬𐯭𐯮𐯯𐯰𐯱𐯲𐯳𐯴𐯵𐯶𐯷𐯸𐯹𐯺𐯻𐯼𐯽𐯾𐯿𐰀𐰁𐰂𐰃

(19). Tomb of the .

Small rectangular tomb with sloping pit and remains of painted inscriptions :- (1)     

   (2)    .

(3)     .

(4)        .

(20) Tomb of the .

Large rectangular tomb much quarried into but with remains of a sculptured false door, inscribed :-

(1)     

(2)     

(3)     

(21) Tomb of the .

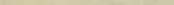
Rectangular chamber with sculptured false-door on left wall: the hieroglyphs are painted and very fine in quality. Tomb unfinished. The inscriptions (on the false door) run :- (1)    (2)   

(23) Tomb of the .

Large rectangular columned tomb without painting.
Only the large lintel over the entrance and the drum
lintel are inscribed.

Limit:- (i) $\frac{1}{\sqrt{x}} \left(\frac{1}{\sqrt{x}} + \frac{1}{\sqrt{x}} + \frac{1}{\sqrt{x}} + \dots \right)$

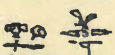
[illegible]

Round Lintel:- 

(24) Tomb of the Pharaoh Seti I 18th Dynasty 1291-1279 BC

Large rectangular tomb with side chamber in left-hand wall. All the walls have been much quarried into. Square pillars support the ceiling of main-chamber. There are remains of inscriptions on the upper parts of the walls and columns from which the following titles of the owner can be made out:-

(25) Tomb of the

Very large rectangular hall about 27 m. long by 9 m. wide with a double row of five pillars each down the axis of chamber. Dromos lintel. Sculptured false door on left-hand wall and small chamber out of right-hand wall. Part of pillars and roof fallen. Painting of very fine quality. On the left-hand half of left wall were two scenes (1) representing the owner of the tomb (a ) spearing fish in a marsh, and (2) showing a number of officials bearing offerings: among these officials are (1)  (2)  (3)  (4)  (5)  (6)  (7)  (8)  (9)  (10) 

Among the figures in this scene are — (1) a priest sharpening a flint knife with legend:  and (2) a number of dancers with ibex-headed wands.

It is unfortunate that the name of this great chieftain has been lost but there can be no doubt that this tomb dates from the Early XIIth Dynasty.

Main Chamber. Scenes similar to those in tomb of
 Thetage and similarly arranged.

Left column, front face; Prayer to Anubis: right-
 face: 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20.

Left centre column, left face; 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20: front face,
 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40.

Architecture. Prayers to Osiris and Anubis.

Inner wall to left of shrine: 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60
 61 62 63 64.

Shrine, inner wall: 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84
 85 86 87.

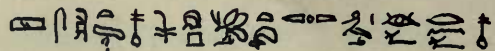
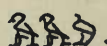
Tomb A. Uninscribed.

Small rectangular chamber with sloping shaft
 to sarcophagus chamber. Drums lintel. In the
 sloping shaft were found two coffins (No 2 & 3)
 and in the Sarcophagus chamber one coffin
 (No 1).

Coffin No 1.

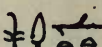
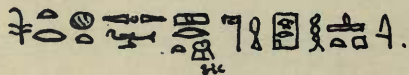
Rectangular wooden coffin with inscription painted
 in detailed hieroglyphs. The inscriptions on lid and

sides give the de hetep seten formulae to Osiris and Anubis. On the left side of the box is a list of offerings in forty-seven vertical lines. The titles and name of the owner are :-

 . [Now in the Ashmolean Museum, Oxford]

Coffin No 2.

Rectangular wooden coffin with inscriptions painted in detailed hieroglyphs. The inscriptions on the sides of box give the de hetep seten formulae to Osiris and Anubis with the following titles and names :-

 .

[Now in the Cairo Museum]

Coffin No 3.

Rectangular wooden coffin with inscriptions painted in black. On the sides of the box the inscriptions give the de hetep seten formulae to Osiris and Anubis for a man named

  .

[Now in the Liverpool Museum]



FIG. 1.



FIG. 2.

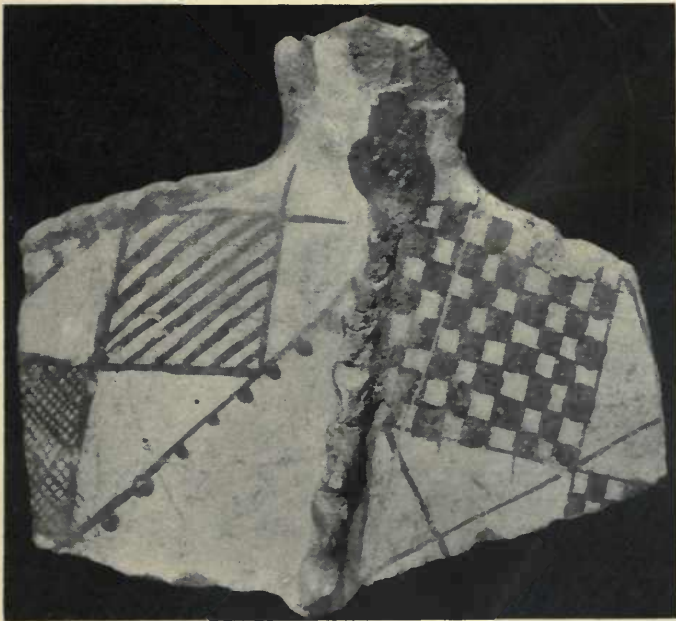


FIG. 3.



FIG. 4.

1202



FIG. 5.



FIG. 6.

PREHISTORIC PAINTED POTTERY IN MALTA

By T. ERIC PEET

Ten years ago Malta was known to archaeologists only for its megalithic 'Sanctuary' of Hagiar Kim and for the steatopygous figures found there. Since then, thanks to the untiring efforts of Professors Zammit and Tagliaferro, Albert Mayr, Dr. Ashby and others, enormous strides have been made, and we possess sites of various types, temples, dwellings and cemeteries, all of which have yielded large masses of material. The extraordinarily various and original pottery of the islands has already been reduced to order and classified,* and new fabrics are continually being added to the long list.

But it is only the work of the last eighteen months that has revealed the fact that Malta possessed a series of painted pot-fabrics which can be traced back to their earliest origins on the islands themselves.

The origin of painted ware probably lay in the love which the prehistoric Maltese had for the rich red pigment used by almost all neolithic and some paleolithic tribes of Europe, often in connection with burial. Thus we find on all Maltese sites, Cordin, Halsafieni, Mnajdra etc., vases of the usual Maltese incised type, on which the linear incisions are overlaid with narrow bands of this loose red pigment.† In closer and more complicated cross-hatched patterns the whole design is smeared over indiscriminately with red. This is the very beginning of coloured decoration, and we have an interesting parallel to it in the incised vases found by Orsi in the Cave of Cala Farina, in South-east Sicily, some of which had undergone a partial, never general, coloration in red.‡ In both cases there is no special slip, and we can scarcely describe the vases as true painted ware.

*See Tagliaferro on the Halsafieni pottery in *Liverpool Annals of Archaeology and Anthropology*, vol. III. Also the various excavation reports.

†*Op. cit.*, Pl. XI, Type G. 21. In the Halsafieni examples the surface is light, elsewhere it is dark. In either case it is the same polished slip as in unpainted vases.

‡*Bullettino di Paleontologia Italiana* XXXIII, p. 16. See also Wosinsky *Die Inkrustierte Keramik* for red incrustation in Europe generally, pp. 172-177.

A slight advance on this is seen in some fragments from Santa Verna, Gozo, where the incised design is carried out in double line so as to form wide bands, which are then coloured with a red paint far superior to the powdery pigment of the earliest attempts. The spaces outside the coloured bands are often filled with punctured dots. The ware is still the ordinary Maltese polished slip ware,* but a special effort has been made to select vases with a good ochre surface. Even now we have not reached true painted ware, for the colour is merely being used to heighten the effect of incised decoration.

Amongst the pottery of Ix Xaghra ta Cordin, the finest, and the last to be excavated of the three megalithic structures on Corradino Hill, are several fragments which at first sight look like ordinary Maltese slip ware, but which, on closer inspection, reveal bands of very poor paint. This paint, if such it can be called, varies in colour. It may be reddish, brown or grey, but it is always poor and thin. The vases to which it is applied are not, as a rule, fine examples of their kind, and vary greatly in the colour of their slip. The designs cannot be recovered from the fragments, but are all simple, carried out in straight or curved bands of from 3 to 6 mm. in width. Here the paint is left to produce its effect without the aid of incision, and although there is no specially prepared slip, nor even an attempt to choose suitable light-slipped vases, we may consider that we have a painted fabric.

Slightly more advanced than these are the few painted fragments from Halsafieni (Tagliaferro's Type F. 15). In these the side of the vase to be ornamented—sometimes it is the inside—is covered with a dull ochre slip which has no polish. On this are laid in three cases (all fragments of one vase?) numerous discs of the size of a sixpence, in matt brown paint, and in the other cases a few vertical and horizontal bands in matt red.

The recent excavations of a megalithic building at Torre ta Santa Verna, Gozo, have revealed to us a further stage in the history. Here, two true painted wares occur. The first is exactly like the red-on-ochre ware of Halsafieni, except that the ochre slip is lighter in colour, thicker, and covers the whole vase inside and

*Maltese polished slip ware (Tagliaferro's classes E. 10 & 11, G. 18, & 20—26) forms the bulk of the pottery found on all Maltese megalithic sites. The hard surface, which may fire to any *dull* shade of black, grey, brown, yellow or red, is quite unmistakable and is peculiar to Malta. The polish is very variable in quality.

out. In the second ware the slip is still thicker and of a rich cream colour, again without polish. The design is carried out in thin bands of matt chocolate paint. These bands, about 2 mm. broad, usually run in pairs, but the patterns, which cover only a small proportion of the surface of the vase, cannot be determined from the small fragments we possess.

Such are the painted wares which are definitely associated with the megalithic period in Malta. Omitting the primitive painted incised wares, the known fragments are not fifty in all, yet we seem to have every link in the chain which enables us to follow the rise of a native painted pottery on the islands. It must not be supposed, however, that even our best examples are highly artistic products. Their surface is rough and lumpy, they are, like all Maltese megalithic pottery, hand-made, and there is no subtilty in the decorative schemes. The Cretan potter of Early Minoan III would have stood aghast at their clumsiness.

Yet to the student of Maltese antiquities they have already proved their value by confirming the hypothesis, probable on other grounds, that Santa Verna and Halsafieni are, in part, at least, later than Cordin and Mnaidra. The trouble hitherto has been that everything found in Malta seemed to belong to one and the same date. But since the finding of painted pottery, the excavations at Bahria,* and Professor Zammit's discovery† of an early burial at Bukâna, we have begun to see light.‡

It is now natural to ask whether we have any specimens of an even later development of the art of pottery painting in Malta.

In the Museum at Valletta there has been for some years a fine vase of painted pottery§ the *provenance* of which is not certainly known, though it came from somewhere near Rabato. It is a globular vase with a cylindrical neck and four small handles on the shoulder. The clay is covered with a white slip and the ornament carried out in bright red.

The other pieces of this ware known to me in Malta are as follows:—

**Papers of the British School of Rome*, Vol. V, pp. 149 ff.

†*Report of the Valletta Museum for 1911*.

‡It would serve no useful purpose to compare these painted wares with those of other parts of the Mediterranean, e.g., Crete and Sicily, with which they have practically nothing in common.

§Figured by Mayr in *Die Insel Malta*.

1. Nineteen pieces from a shaft dug in the glacis at Notabile near St. John's Gate (found with prehistoric, Roman, and Arab objects).
2. One piece (from a large vase) deposited in the Museum among the confused contents of a series of Punic tombs dug some years ago in the Hill of Tac-Caghki.
3. One piece said to have been found at the megalithic temple of Xeuchia in Gozo. All the other pottery brought to the Museum along with it is of well-known megalithic types.
4. Four pieces from Ta Ghammieza near Rabat in Gozo.
5. Four pieces, all of large vases, from Haggiaria near Rabat, Gozo.
6. One piece from Gnien is Sultan, near Notabile.

The fragment No. 6, and six of those included in No. 1, are in the Museum at Notabile; the rest are in that of Valletta.

In all cases the clay is greyish, burning to yellow-red at the surfaces, coarse and full of white particles. The slip is a thick creamy white, which wears off but does not flake. The paint of the design is a bright red on the small vases and darker red on the large. No shapes can be definitely ascertained.

The designs on the larger vases are simple, carried out in thick strokes. Fig. 1 is one of the most complicated examples of this type. On smaller vases the patterns are more interesting. Triangles and squares filled with single- or cross-hatching or chess-board design are the favourite elements of composition. These are combined with taste and regularity (figs. 2 and 3). Small strokes are frequently added along the lines that bound the patterns (figs. 2, 3 and 4). Fig. 4 shows a more irregular design with a feather motive that is not unusual. The patterns, except on the whole vase figured by Mayr, are all rectangular. On the larger vases we often have painted cordons in relief (fig. 3).*

It is remarkable that not a single fragment has yet been found in a dateable archaeological deposit. No site that has been systematically dug has ever yielded it. These vases are, both in technique and design, much more advanced than any of the types we have described, and we can hardly help assigning them to a

*I am indebted to the kindness of Dr. T. Ashby for all the photographs.

later date. They remind one most forcibly of the painted wares of the First Siculan Period in Sicily, the elements of design being almost identical in the two fabrics and the method of arrangement often very similar. Nevertheless, we have no evidence as yet for asserting any connection between the two. Although we have little idea of absolute dates in Malta, it is virtually certain that the Maltese examples are definitely later than the Sicilian. Indeed, as they usually seem to appear in or near spots where Roman antiquities occur, they may quite possibly belong to as late a period as the Roman.

To the same period, whatsoever it may be, we should perhaps assign a thick red polished ware with matt white ornament, of which six pieces are known, one from Haggiaria in Gozo, one from the glacis at Notabile, three from the surface of a field at Bahria, and one from near St. Paul's school at Notabile. The last is a curiously-shaped piece, which the keeper of the St. Agatha catacombs states that he found in a rock tomb of the usual Punic type, together with two lamps and a piece of a third. The lamps are late Punic or even Roman in date, but as the tomb had been previously ransacked the evidence is worthless. The curious object in fig. 6, undoubtedly meant for a female figure, seems to have ornamented the handle of a vase. The white painted lines are visible on the front of the skirt. It is worthy of notice that the chequer pattern formed by three lines crossing three which occurs on two of these fragments (see fig. 5) is also seen on the handle stump of the piece of red on white ware shown in fig. 2. The coincidence at least suggests the contemporaneity of the two wares, especially as the ornament is rather a peculiar one.

For the present we must be content to leave both vases undated, and to leave unsolved the question whether they are developments of the prehistoric fabrics or whether they represent a totally different tradition. Doubtless a happy discovery will, ere long, place the solution in our hands.

I have to thank Dr. T. Zammit, Curator of the Valletta Museum for permission to publish both photographs and descriptions.

A NEW ROYAL HITTITE MONUMENT FROM NEAR MARASH IN NORTHERN SYRIA

By JOHN GARSTANG, M.A., D.LITT.

In the extreme north of Syria the mountain ranges, known to the Turks as the Kurd Dagħ and the Giaour Dagħ (Amanus), form the eastern and western boundaries of a broad valley which varies generally from ten to fifteen miles in width. Two rivers flow through this valley: one, called the Kara Su (Black Water), rises near Sakje-Geuzi, and struggles southwards through swamps and marshes until it finds a way into the lake which marks the confluence of the Orontes and the Afrîn, not far from Antioch. The other river flows northwards to join the Jihan, or Pyramus: it is called, in contrast, the Ak Su (White River), and the distinction is somewhat warranted, as it flows more quickly and the river bottom is more often stony and free from silt. The divide between the sources of these two rivers, lying just northwards from Sakje-Geuzi, contains large swamps, which in winter time are united in a great shallow lake, draining into the Ak Su northwards.

The whole 'valley' is thus really a narrow plain bounded by parallel ranges of mountains. It is not, however, altogether continuous, for here and there outlying hills and isolated ridges divide it into well-defined districts, each one at the present time claiming its own chief. The same divisions were operative no less in antiquity and there is now evidence to show that in the later Hittite period (1000 B.C.-850 B.C.), at any rate, the valley was correspondingly divided up into principalities or petty kingdoms. Sakje-Geuzi itself marks one such district; and Sinjerli was clearly the centre of another royal domain adjoining it, immediately to the south. In the opposite direction, at the head of the valley, placed at the foot of the Taurus mountains which close its northern end, is Marash, historically a royal seat, as its numerous monuments testify. Between Sakje-Geuzi and Marash, there is, however, another isolated open district, the chief village of which is now Hadji Bey Bekli Keui; and here Dr. A. Wilkin and myself finally located a royal Hittite monument of which we had heard during our residence at Sakje-Geuzi (see Plate XXIII).

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26



A NEW HITTITE MONUMENT FROM NEAR MARASH, ASIA MINOR.

The monument is very solid and heavy, measuring 120 cms. by 66 by 34, the stone being dolerite. The face is flat, while the top and back are rounded. Notwithstanding its great weight it seems to have been brought to where we saw it, in a mill, from Choban Tepe, a mound about a kilometre distant towards the N.E. From the same mound other sculptured stones, of which we have record, have at various times been taken to Marash.

The subject of the sculpture, which is carved in relief about 1 cm. high, shows a royal personage facing left, holding up with his outstretched left arm a hare or rabbit, while with his right hand he clasps the triangular-shaped bow which rests upon his shoulder. He wears the Hittite conical hat with bulbous top, familiar from other similar monuments of Northern Syria. He is heavily bearded, and his hair is dressed in a large curl behind the neck, in the style characteristic chiefly of Hittite art of the later period, about the 9th century B.C. The nose is strong and prominent, but the features are crudely represented. His dress is a long robe with short sleeves, broad waistband, and apparently a deep fringe round the bottom of the skirt. A long sword is attached to the belt. His royal rank is denoted, as usual, by a winged rosette above his head; but the most curious feature about the design is the fact that he stands, it would seem, upon the back of a short-tailed animal. What the animal was, unless it were a bull, is not at all evident, as a corner of the sculpture is here broken away and missing. From what is known of Hittite symbolism, however, such a position is an attribute of divinity. We must suppose that in this case, the king is represented as impersonating a god of the chase, and for such impersonation there is analogy in the sculptures of Sinjerli.

However that may be, it seems incontestable from the evidence of this sculpture, and of other fragments found in the same mound, that this was another 'royal' site, similar in many respects to that of Sakje-Geuzi.

At Marash we gained information and secured photographs of several new sculptures, and re-studied some which are on record but have been lost to view for some time. We hope to publish these also at an early date.

THE DISTRIBUTION OF MYCENEAN REMAINS AND THE HOMERIC CATALOGUE

By M. S. THOMPSON

The following paper is an attempt to see how far the distribution of Mycenaean remains corresponds with the area covered by the Homeric Catalogue. The attempt has frequently been made before, but recent discoveries have greatly increased the available knowledge of the boundaries of the Mycenaean world. Comparatively few of the towns mentioned in the Catalogue have yet been thoroughly excavated, and it is still only possible to consider the Catalogue by districts and not town by town; in this way the danger is avoided of laying undue emphasis on a single site, where what seems at first to be a close resemblance between literary and archaeological evidence may eventually prove to be a chance coincidence.

The list of Agamemnon's forces is given in the following order: East Central Greece from Phocis to the Isthmus; the Peloponnese beginning in the N.E. and ending in the N.W.; the coast and islands north of the Gulf; the line of islands across the southern Aegean; and lastly, in contrast to the rest, and apparently in no geographical order, Thessaly. Following the same order let us consider the distribution of early civilisations in these five districts.

EAST CENTRAL GREECE

In the northern portion of this district, that is to say in Phocis and Boeotia, Mycenaean remains have been discovered at many sites, among which the following are the more important:—Elateia,* Daulis,† Orchomenos,‡ Ghulas,§ Poliyira,¶ Thebes,|| Lebadeia,** Tanagra,†† Dilisi,‡‡ on the shores of the bay of Anticyra on the Corinthian Gulf,§§ and at Delphi.¶¶ At Orchomenos, Poliyira,

* Near, but not at the classical site. 'Εφ. 'Αρχ., 1908, pp. 63 ff.

† *Myk. Vasen*, pp. 43 ff.

‡ Bulle, *Orchomenos*.

§ *B.C.H.*, 1894, pp. 271 ff.

¶ Bulle, *op. cit.*, p. 116.

|| *Πρακτικά*, 1910, pp. 152 ff.

** *Myk. Vasen*, p. 42.

†† *Myk. Vasen*, p. 43.

‡‡ *B.S.A.*, XII, p. 94.

§§ *Ath. Mitt.*, 1889, pp. 267 ff. *Πρακτικά*, 1907, p. 111.

¶¶ *Fouilles des Delphes*, V, pp. 1 ff.

Elateia, Ghulas, Thebes and Delphi, Mycenaean sherds earlier than the Third Late Minoan Period have been found; and near Elateia a vase of the First Middle Minoan Period which is, however, probably a casual importation. At the Mycenaean sites, on the Island of Euboea,||| all three periods of the Late Minoan Age are represented. The main focus of Mycenaean civilisation in Central Greece is beyond reasonable doubt close to the shores of Copais. The tholos tomb at Orchomenos, with its carved ceiling, denotes a culture as fully developed as the finds from Mycene, and if the other remains at Orchomenos have not fulfilled expectations, it is owing to the denuded condition of the site as a whole. Enough has survived to prove the importance in early days of this traditional Minyan city. Besides Late Minoan wares of the usual types, there is also at Orchomenos great quantities of a grey wheel-made pottery, which is often called 'Minyan.' This at Orchomenos seems to be in the main approximately contemporary with the shaft graves at Mycene, although at Phylakopi, in Melos, it occurs in small quantities and in a cruder form at an earlier date. The distribution of this ware, which is easily distinguishable, is instructive. Small quantities of it occur in the Argolid, in Attica, along the Thessalian coasts, and in the sixth and seventh cities at Troy,* which compared with the large quantities found at Orchomenos indicate an important and early trade radiating if not from Orchomenos itself, at least from its immediate neighbourhood. This trade, moreover, presumably went up the Euripus, along the Thessalian coasts and thence across to the Troad. The example of Minoan script found at Orchomenos† is particularly interesting, as it is not identical with that found in Crete; it indicates, perhaps, that by the time the centre of power had passed from Crete to the mainland, the difference between the mainland and Crete was not merely one of wealth or power, but also of language or dialect. This may add farther point to the small part played by Crete in the Epics, despite its past. On the other hand, the Orchomenos script may eventually be proved to differ also from that used in Southern Greece, in which

||| Πρακτικά, 1907, pp. 114 ff.

* *Prehistoric Thessaly*, p. 251.

† *Scripta Minoa*, Vol. I, p. 57.

case it will help to differentiate the 'Minyans' from other contemporary tribes. Close to Orchomenos are several early settlements of which the chief is Ghulas (? Arne). The walls of Ghulas, enclosing an area several times as great as Mycene, are among the greatest relics of the Mycenaean age still surviving. In other respects this site is almost entirely denuded, and only a few handfuls of sherds were found in the so-called palace. Some doubt has been cast on the date of the 'Minyan' dykes in the bed of Lake Copais, but if prehistoric, as seems highly probable, they are without parallel on the mainland of Greece or in the Aegean area.

We may then safely regard East Central Greece, as far south as Attica, as a thoroughly Mycenaeanized region in the Third Late Minoan Period. In several places Mycenaean civilisation began at an earlier date, especially at Orchomenos, but since this civilisation in the first instance probably came by sea, its first appearance may be found on Euboea. The portion of the Catalogue dealing with this region is noticeable for the large number of towns enumerated and for the separation of Orchomenos from the rest of Boeotia.

Mycenaean remains in Attica* are also plentiful, but they belong for the most part to the Third Late Minoan Period. The chief sites are Menidi, Spata, Halike, Thoricus, Marcopoulo, Brauron, Prasiae and the acropolis of Athens. Excepting the contents of the tholoi at Menidi and Spata, none of the objects yet found denote any great wealth. The remains on the acropolis, though scanty, are important, and include traces of a large building and sherds of the Second as well as the Third Late Minoan Period. Aegina and Salamis also contain Mycenaean sites, and similar remains have been found at Eleusis and at Megara.† There is, therefore, no archaeological reason for suspecting the passage in which Athens appears in the Catalogue; and it may also be noted that in the dispute between Athens and Megara for the possession of Salamis the Megarians claimed that the Megarid was included in the true version of the Catalogue.

* Tsountas and Manatt, p. 8 ff.

† *Myk. Vasen*, p. 83.

THE PELOPONNESE.

The prevalence of Mycenaean remains in Argolis is so well known that a list of the sites is unnecessary. Despite the recent excavations at Tiryns there is hardly any evidence for true Minoan civilisation in Argolis before the Late Minoan Period; earlier settlements probably existed, but presumably never attained to any great size or importance. Outside the Argive plain, Mycenaean (L. M. III) remains have been found near Porto-Kheli opposite Spetsia,* close to Iria, at Dhimaina near New Epidaurus, and also at Kalauria.†

A number of Mycenaean objects, reported to have been found near Aegium,‡ have from time to time appeared in Athens; from Corinth,§ or its immediate neighbourhood only one Mycenaean vase is, I believe, yet known, but the excavations at Corinth now in progress may at any moment reveal a Mycenaean city. In the case of Corinth, considering how long Mycenaean culture was domiciled at Mycenae, and taking into account also the significant position of Mycenae on the road leading to the isthmus, no argument based on negative evidence can be admitted.

In the Vale of Sparta, there are Mycenaean sites at Vaphio, Arkina, Amyklæ¶ and at Sparta itself.¶ The rich contents of the tholoi at Vaphio, which is a considerable distance from the sea, is evidence for a high standard of Mycenaean civilisation in central Laconia as early as the Second Late Minoan Period, and an important city in the neighbourhood, still awaiting discovery, seems a probable inference. The Mycenaean site at Sparta, on the opposite side of the river to the classical town, was much destroyed, but enough is left to show that it was once of considerable size. The pottery here has all been attributed to the end of the Mycenaean age, but a few of the sherds seem to me to belong in style more to the Second Late Minoan Period.**

* *Πρακτικά*, 1909, pp. 183 ff.

† *Arch. Anz.*, 1911, pp. 149 ff. *Ath. Mitt.*, 1895, pp. 297 ff.

‡ Mr. T. W. Allen has shown that Agamemnon's capital was at Corinth, and that his kingdom extended from Aegium to Mycenae; he was, in fact, King of Achaea. *J.H.S.*, 1910, pp. 292 ff.

§ *Myk. Vasen*, p. 44.

¶ *Εφ. 'Αρχ.*, 1889, pp. 130 ff.

¶ *B.S.A.* XVI, pp. 4 ff.

** *B.S.A.*, XVI, Pl. II d, and fig. 4.

On the west side of Taygetus, and not far from the alleged site of Gerenia, a tholos tomb has been found at Kampos.†† The pottery, which is very indeterminate, indicates that this tomb probably belongs to the Third Late Minoan Period. A few Mycenaean sherds, also late, have been found in the so-called grotto of Nestor at the Messenian Pylos,‡‡ and near the same site is a tomb belonging to an earlier period. The Messenians being vassals of Nestor are not mentioned in the Catalogue, but are represented by their towns Dorion and Kyparisseis.*

Professor Doerpfeld's excavations in Western Greece have added considerable information to our knowledge of Mycenaean civilisation in that region. At Kakovatos,† the Homeric Pylos, there is now evidence for Mycenaean culture as early as the Second Late Minoan Period. At Samikon,‡ perhaps the Homeric Arene, Mycenaean sherds have been found together with crude wares analogous to those found at Olympia, Pisa and Leukas. For the moment, however, we must follow the Catalogue to Arcadia.

Few sites in Arcadia have yet been excavated and at only one, Tegea, have Mycenaean remains (L.M. III) been found.§ Owing to Pelasgian legends, Arcadia is often regarded as being probably an important centre of Mycenaean civilisation. Although negative evidence is of little value, this view seems most unlikely; all the existing evidence goes to prove that Mycenaean civilisation begins near the coasts and spreads inwards. Consequently, inland Arcadia is one of the last districts where early or rich Mycenaean sites are to be expected. On the other hand, late sites will presumably be found in many parts of this region. Elis and the north-west corner of the Peloponnese are only scantily known to the author of the Catalogue, and four towns alone are mentioned. The early remains yet known in this district are few, but it is noticeable that they are not Mycenaean at all. The prehistoric pottery from Olympia and Pisa¶ connects generally with that found further north. One sherd in the Third Late Minoan style was found at Olympia, which helps to date this early deposit.

†† 'Εφ. 'Αρχ., 1891, pp. 189 ff.

‡‡ B.C.H., 1896, pp. 388 ff. Πρακτικά, 1909, pp. 274 ff.

* J.H.S., 1910, p. 300.

† Ath. Mitt., XXXIII, pp. 295 ff.; XXXIV, pp. 269 ff.

‡ Ath. Mitt., XXXIII, pp. 320 ff.

§ Πρακτικά, 1909, p. 303 ff.

¶ Ath. Mitt., XXXIII, pp. 185 ff.; 320 ff.; XXXVI, pp. 163 ff.

THE WEST COAST AND ISLANDS NORTH OF THE CORINTHIAN GULF

The change in the Catalogue noticeable at Elis continues further north; few towns are mentioned and only the coast is known. The archaeological remains correspond to this state of knowledge. Mycenaean sherds (L. M. III) have been found at Calydon, Koronta^{||} and Palairos, but further inland, at Stratos and Thermon, remains of a non-Mycenaean character occur. At Thermon an early, crude, and non-Mycenaean pottery is found directly beneath the archaic temple, thus indicating, apparently, that a Mycenaean period never existed there, and has not merely escaped discovery. The evidence from the islands fully bears out this view.

A considerable number of Mycenaean vases (L. M. III), which were found many years ago at Livatho, Same, Pronos and Ithaca, are now in the Neuchatel Museum.* Exact details of the circumstances under which they were found are wanting, but some can now be supplied by Dr. Kavvadias' recent excavations at Livatho in Cephallenia.† The excavator remarks that before the importation of Mycenaean vases Cephallenia, like the Troad, seems to have had an indigenous style of its own, and that, after the importation of Mycenaean wares began, these local vases continued to be made or at least were still in use. The pottery found at Leucas‡ seems to me to be in no sense Mycenaean, but to resemble generally the primitive wares from Olympia and Stratos and to connect ultimately with the North Adriatic styles. A certain Mycenaean influence may be allowed perhaps to have influenced this pottery in some of the vase-shapes. The pottery of Leucas also does not seem to bear any close relation, as a whole, to the non-Mycenaean wares of Thessaly. A long bronze sword, with decorated hilt, and a few other objects show Mycenaean connections. Thus with Leucas we are on the boundary both of the Mycenaean and the Homeric world; a point which is still more significant if Leucas is not Ithaca but Dulichium, and consequently, according to Homer, a recent colony from Elis, and apparently not connected in origin or polity with the Cephallenian islands.§

|| *Πρακτικά*, 1907, pp. 100 ff.

* *Rev. Arch.*, XXXVII, pp. 128 ff. For Ithaca cf. *B.C.H.*, 1905, pp. 151 ff.

† *Comptes Rendus*, 1909, pp. 382 ff.

‡ *A.J.A.*, XV, pp. 416 ff. (report of lecture). *Brief über Leukas-Ithaka*, I-VI. As will be seen above, I am unable as yet to accept fully the excavator's views.

§ *J.H.S.*, 1910, p. 305.

THE AEGEAN ISLANDS

The prevalence of Mycenaean remains along the line of islands across the south of the Aegean as compared with their paucity in the Cyclades has been so often noticed that no list of finds seems necessary here.¶ The importance of the Cyclades in early Greek times depends on the Greek colonisation of the Anatolian coast, of which there is little or none in Homer.

THESSALY

Thessaly and the Spercheius valley, throughout the prehistoric age, were inhabited by a barbarous and non-Mycenaean people. The early signs of Mycenaean or southern civilisation are as follows:—A certain amount of Minyan ware is found near the shores of the Pagasaeon Gulf; but further inland this is very rare. Pottery of the Second Late Minoan Period has been found in small quantities on the Pagasaeon Gulf, and one group of vases of a similar date is known from near Elassona. Pottery of the Third Late Minoan Period is found scattered widely over Thessaly, but it is never in large quantities and the local crude wares always predominate.* With this archaeological evidence may be compared the Homeric accounts of Northern Greece, which contain references to recent internal wars against local tribes.†

GENERAL CONCLUSIONS ABOUT THE ACHAEAN CATALOGUE

At this point, before passing on to the Trojan portion of the Catalogue, a few conclusions may be conveniently considered. As far as the mainland is concerned, the area covered by the Catalogue coincides in a marked degree with the distribution of Mycenaean remains. The chief Mycenaean centres are prominent in Homer, and in the north the boundaries of what may be termed the Homeric and Mycenaean regions agree in detail. Thessaly, which was never completely dominated by Mycenaean civilisation, is, in Homer, half civilised, and peopled by a barbarous folk ruled by Achaean chieftains. On the west coast also, the districts known to Homer

¶ *Ionian and the East*, pp. 47 ff.

* For full details see A. J. B. Wace and M. S. Thompson, *Prehistoric Thessaly*.

† Il. B 740 ff.

are Mycenaean, while the interior of the country, which is outside the Homeric world, possesses a rude civilisation of a non-Mycenaean type. In Arcadia it must be left an open question as to whether there is or is not a vital discrepancy between archaeological and literary evidence; for at present, except at Tegea, there is no archaeological evidence either way. The Mycenaean islands in the Aegean are those that are mentioned in Homer, with two possible exceptions, Melos and Thera. Both of these may, however, be included in the *πολλῆσιν νήσοισι* that were the inheritance of the house of Atreus. It is also perhaps worth noticing that Melos, after the decline of the obsidian trade lost its former importance; and it is also not impossible that the eruption at Thera, which overwhelmed the Middle Minoan settlement, caused that island to be only partially inhabited for many centuries. Still it is strange that they are not mentioned. The omission of Cyprus is natural owing to its distance from the rest of the islands, and also to the fact that, though important in the Third Late Minoan Period, it does not seem to have been ever completely a Mycenaean island.

In short the catalogue of Agamemnon's confederacy includes and coincides with the Mycenaean world, for the few Mycenaean sites in Anatolia are at best Mycenaean trading factories, or foreign ports connected with the Mycenaean empire. Thus this Catalogue seems to be in the first instance a national list of the Mycenaean dominions, and only incidentally a list of those who fought against Troy. This may explain the order in which the various districts are enumerated, all with the exception of Thessaly being in a natural geographical arrangement. The last two acquisitions of the Mycenaean world were Thessaly and portions of the west coast, and these consequently would not appear in an earlier national list. Such a list would have begun in Boeotia or Phocis and would have followed the order of the catalogue, as we have it, up to some point on the west coast; it might have ended at the Corinthian Gulf. Then would follow the list of Aegean islands, but Thessaly would not appear. An extension of territory in the west would create no difficulty; it would fall into its proper geographical position* and the jump to the Aegean islands would merely be postponed. The acquisition of Thessaly would cause some inconvenience if the list was to be kept

* The probability that it was colonised from Pylos or Elis might help this.

up to date. Geographically it should be put first; but a half-conquered province could hardly appear first in a national list. Thessaly, therefore, was tacked on at the end, after the Aegean islands and in defiance of all geographical order; but, nevertheless, in its true historical position.

THE TROJAN CATALOGUE

The area covered by Priam's allies is still to a very great extent unknown archaeologically. Troy itself is the only large site at all completely excavated, and many districts still await surface exploration. The fact that Troy and Mycenae were both discovered about the same time has led to a great misapprehension of the true character of the Trojan remains. The great bulk of the Trojan pottery, which is either undecorated or else decorated with incised designs, is not merely unlike any true Mycenaean pottery, but also very different from the pre-Mycenaean wares of Greece. The first signs of any close connection between Troy and Greece are to be found in the sixth and seventh settlements, where first 'Minyan ware, and then Mycenaean (L. M. III) wares appear. Both, however, are in the main imported, and both, too, are rare, so that it is exceeding the evidence to talk of a Mycenaean city at Troy.* Outside the Troad, Mycenaean remains in Anatolia are very few and of late date, with one or two exceptional objects, as a sword from Pergamon and two gems from Priene and Caria.† At the same time there is a large Mycenaean element in later Ionian art; but this is more probably due to a movement from the mainland of Greece consequent on the Dorian invasion than to extensive Mycenaean settlements at an earlier period, though considerable Mycenaean influence, particularly in the south-west, may be allowed prior to the Ionian migration.

The position of Troy itself denotes that it was almost certainly on an important trade route, and it has been suggested that the arrangement of Priam's allies in four lines radiating from Troy denotes the main lines followed by Trojan trade,‡ which

* Cf. Doerpfeld, in Tsountas and Manatt, p. xxx, preface.

† *Scripta Minoa*, Vol. I, p. 63.

‡ J. L. Myres, *J.A.I.*, 1897, pp. 171 ff. Much of what follows is based on this paper.

consequently went east and west and not north and south as has at times been suggested.§ For a north and south trade through or past Troy in prehistoric times I can find no archaeological evidence at all, but for a trade going east and west archaeological evidence exists. Some of the Trojan weapon types suggest an ultimate connection with Cyprus, but others, and these seem mostly of later date, clearly connect closely with the Danube valley, and many exact parallels have been found in Bulgaria.|| Pottery analogous to some of the local Trojan wares has been found at Bos-uyuk, Yortan, Pitane and Gordion;|| on the European side, resemblances have been seen in the few prehistoric sherds yet known from Macedonia* and also in certain of the Servian wares.† To the north of the Danube, however, and on the great central plateau of Cappadocia, traces of extensive early civilisations have been found which from the abundance of painted wares are sharply differentiated from the early civilisation at Troy, as a whole. Both these districts, moreover, are outside the area mentioned by the Catalogue; on the European side Priam's allies are all to the south of the Danube, and none of his Anatolian forces come from the central plateau. Thus, as far as the evidence as yet available can be judged, there is nothing in it to conflict with the view that the districts, which supplied the Trojans with troops, were inhabited by races enjoying a somewhat similar civilisation and intimately connected with an early trade route that passed through Troy itself. There is, however, as yet no evidence for a uniform civilisation in any way comparable to the Mycenaean civilisation in Greece, nor is such a civilisation apparently implied in Homer. Priam's forces were less homogeneous than those of Agamemnon's confederacy, and a diversity of language in one case seems to be referred to in the Iliad.‡ The gold and silver work found at Troy is in many respects curiously unlike that from any Mycenaean site. The golden diadems, with their numerous pendants hung on small chains, suggest from their style a connection with ornaments of a later date

§ Bérard, *Les Phéniciens et l'Odyssée*, I, p. 82.

¶ There are many examples in the Sophia Museum.

|| *Ath. Mitt.*, 1899, pp. 1 ff. Gordion, p. 196. See also finds in Constantinople Museum.

* H. Schmidt, *Zeit. f. Ethnol.*, 1905, pp. 96 ff.; 1904, pp. 608 ff.

† Cf. Vassits, *Præhistorische Zeitschrift*, II, p. 32.

‡ Il. Δ 435.

found at Hallstatt.§ Some of the Trojan jewellery likewise recalls the later jewellery from Ephesus¶ which seems to contain a strong Mycenaean element affected and modified by a native Anatolian style. The amount and character of the silver plate found at Troy is also an important feature; and it is difficult if not impossible to dissociate it from 'Alybe, where is the birthplace of silver.'|| The name Alybe has recently been interpreted as a transliteration of a Hittite word meaning 'the land of the Halys,' and it has also been suggested that the Homeric names of the Halizonian leaders are translations of the Assyrian '*damgaru*' or 'commercial traveller.' The mines in the Taurus worked by the Hittites were the chief source of silver for the early Oriental world.**

In conclusion there is little to add. The Trojan war was a struggle on the part of the entire Mycenaean world against another power that extended on both sides of the Hellespont. The Catalogue is a list of the Mycenaean world, and by its order shows the direction and manner in which Mycenaean power spread. It also indicates the reason for the Trojan War itself; after the conquest of Thessaly, Mycenaean power, which invariably spread along the coasts, had reached the fullest development which was possible without coming into contact with the Trojan sphere of influence. After Volo (Iolcus) the next port is Salonica, beyond the Axios. The attack on Troy was a blow aimed at the enemies' headquarters and directed along the trade route to the Troad, which started from the Euripus.* It was for this reason that the fleet assembled at Aulis. Helen may have been the occasion of the war, but no wise man would have made her the cause.†

The objection may be raised that Homeric armour is post-Mycenaean and that, in consequence, Homeric geography cannot refer to the Mycenaean age with the accuracy suggested above. Two answers may be made to such an objection. First, as Homer is admittedly writing of a war that occurred before his lifetime, he

§ Cf. von Sacken, *Grabfeld von Hallstatt* Pl. XIII, XIV, XV.

¶ *Excav. at Ephesus*, p. 244.

|| Il. B 857. Cf. Myres *op. cit.*

** Sayce quoted by Allen, *J.H.S.*, 1910, p. 315.

* This is shown by the distribution of 'Minyan' ware.

† Cf. Hdt. I, 3.

must, like all ancient poets, be considered anachronistic unless definite evidence can be brought to the contrary. Homeric armour, for example, I believe to be that in vogue during Homer's lifetime. There are, however, degrees in anachronisms according to the subject involved. Anyone, to-day, for example, who sat down to write an epic of the Napoleonic wars without long research would probably be correct in the geographical distribution of the combatants, but even though trying to avoid anachronisms, which an ancient poet would not mind, would probably arm the combatants with mid-Victorian weapons. Homeric geography can easily belong to an earlier stratum than Homeric armour. Secondly, I would question if Homeric armour is really post-Mycenean at all, and in another paper I hope to show that the criteria commonly used to prove that Homeric armour is of a late date are all satisfied in that late phase of Mycenean civilisation rightly called Achaean by Dr. Mackenzie and separated by him from the subsequent Dipylon Age. The difference in date between Homeric armour and Homeric geography, I would therefore suggest, is very slight; nor does the knowledge of Asia shown in the body of the poems seem any more than a 'Mycenean' of the mainland* after the Trojan war might reasonably have had. If the Catalogue is, in the first instance, a list of the Mycenean world and only incidentally a list of those who went against Troy, there is no reason to assume it was first invented for the purposes of the Epic; it may rather be a list that was added to and increased as Mycenean power developed. But the developed and late form in which it survives in the Iliad seems, in archaeological terminology, to be of Mycenean rather than of Dipylon date.

* But see *J.H.S.*, 1910, p. 313.

TWO PREHISTORIC SLATE PALETTES

In 1908 I secured at Luxor the two Prehistoric Slate Palettes figured in Plate XXIV. Both specimens are rubbed in the centre and stained with green, showing that they have been used for grinding the green pigment used by the early Egyptians for toilet purposes. The smaller of the two, measuring 6 inches by $3\frac{1}{2}$ inches, has incised upon the upper surface a figure of a Harpoon upon the top of a pole (fig. 1); this is certainly the Harpoon cult-object so often figured above the boats drawn on the vases of Prehistoric Decorated Pottery. This palette may be compared with one found by MacIver at El Amrah (*El Amrah*, pl. VIII, p. 38), which has sculptured on it in low relief the 'Thunderbolt' of Min.

The second palette, in the form of a fish (fig. 2), measuring $9\frac{1}{4}$ inches by $5\frac{1}{2}$ inches, is of greater interest, for, as far as I am aware, it is the first example that has been recorded which is decorated with an incised scene. The animals depicted are three gazelles, a leopard, a dog (?), and two birds. The drawing is rough and the lines are only very lightly incised. It is evidently of much earlier date than the palettes with hunting scenes in low relief which have been figured by Legge in the *Proceedings of the Society of Biblical Archaeology*, Vol. XXII, pp. 125-139, 270-271.

PERCY E. NEWBERRY.

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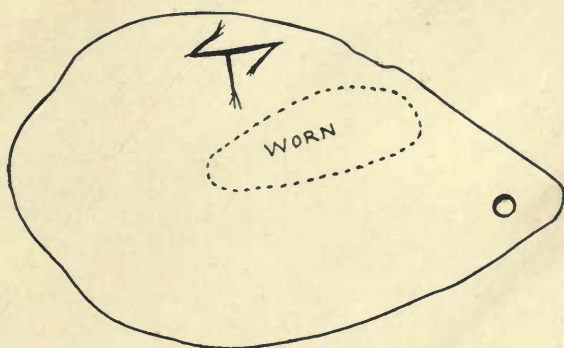


FIG. 1.

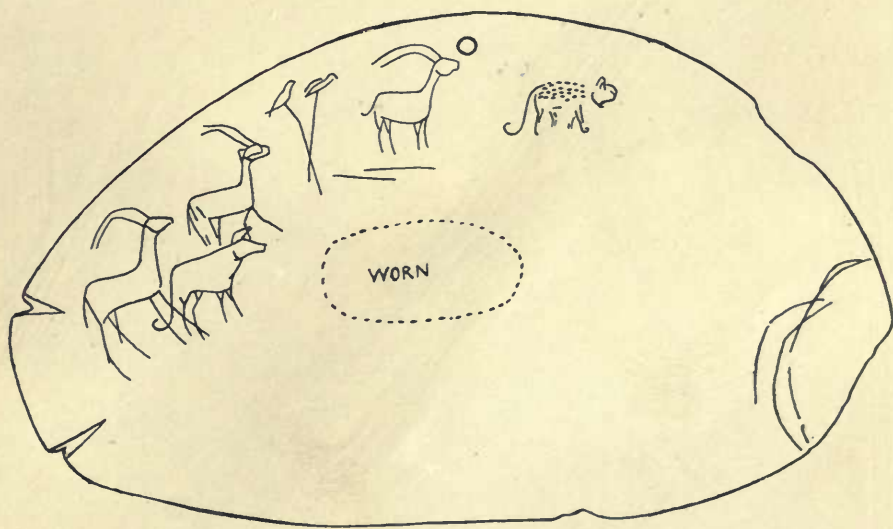


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SOME NOTES ON HOMERIC ARMOUR

By MAURICE S. THOMPSON, B.A.

In a previous paper* I endeavoured to show that the Homeric Catalogue gave an accurate representation of the geographical and political conditions at the end of the Mycenaean age. Such a view would be seriously invalidated if it could be proved that the armour described by Homer was definitely of a much later date, although there is no objection to what may be termed the geographical standpoint being somewhat earlier than the description of life given in the Epic. I intend, therefore, now to take the features in Homeric armour which have been often used to differentiate it almost entirely from that of the Mycenaean age, and see at what date they first appear. It will, I think, be seen that all are to be found in that late phase of Mycenaean art which Dr. Mackenzie† has termed 'Achaean.' To this phase he attributes the Warrior Vase from Mycenae and other analogous vases on which figures of human beings and animals are represented. The novelty of his view lies not so much in the date attributed to the Warrior Vase, nor in the application of the term 'Achaean' to it,‡ but in the theory that this style of vase painting in no way foreshadows the subsequent geometric style. Since the Warrior Vase and the class of pottery to which it belongs will frequently be referred to in the following pages a few details as to its provenance and also a few notes on other similar sherds may be found convenient. For a fuller account I must refer the reader to Dr. Mackenzie's paper. The idea that the Warrior Vase was found with or near 'geometric' sherds is apparently erroneous, and Tsountas points out that the vase in question was found at a depth of five metres, while the only 'geometric' sherd noticed by Schliemann was two metres below the surface.§ The closest parallel to the figures on this vase are the warriors on the well-known painted stele from the same site. This was found in a late Mycenaean tomb, not *in situ*, but used to block up the entrance to another tomb hewn in the side. It belongs,

* *Liverpool Annals*, IV, p. 128.

† *B.S.A.*, XIII, pp. 423 ff.

‡ Ridgeway, *Early Age of Greece*, pp. 299.

§ *Rev. Arch.*, 1896, pp. 19 ff.; cf. 'Εφ. 'Αρχ., 1896, p. 14.

therefore, to the Mycenaean age, although to a late period in it.† Great emphasis is, however, often laid on its late date, and the fact is frequently emphasized that it is an old carved stele, plastered and painted over; with the apparent implication that the painting is not Mycenaean at all. In point of fact it merely proves that Mycenaean art lasted more than a week. The marked similarity between the stele and the vase has given rise to the idea that both were suggested by one original; and in this connection another monument from Mycene is of some interest. This is the fresco from the Megaron;‡ though very fragmentary it shows warriors like those on the Warrior Vase, armed with spears, breastplate and greaves, and if complete might prove, perhaps, to contain the scene that suggested both the stele and the vase. Besides the well-known series of Mycenaean craters from Cyprus, which though of cruder workmanship resemble the Warrior Vase in shape, in the use of figure-decoration, and in the representation of a costume not seen in the earlier Mycenaean periods, there are also many examples from the mainland of Greece and the islands. The following list includes the most accessible specimens, but is probably far from complete. The type of the Warrior Vase being also an innovation, I have included certain vases which agree in shape though they show no figure-decoration.

Mykenische Vasen. Pl. VI, 32. From Ialysus. Shape only.

Mykenische Vasen. Pl. XV, 93. From Nauplia. Shape only.

Mykenische Vasen. Pl. XV, 97. From Nauplia. Chariot (frag.)

Mykenische Vasen. Pl. XXXVIII, 390-395. From Mycenae.

Fragments from different vases, showing chariots, horses, and men armed with helmets, greaves, spears, breastplates or tunics.

Mykenische Vasen. Pl. XXXIX, 403-407. Fragments with horses.

Mykenische Vasen. Pl. XL, 422. From Mycenae. Head of a man. Cf. Fig. 37, *op. cit.*

Mykenische Vasen. Pl. XLI, 426. From Mycenae. Figure.

† 'Εφ. 'Αρχ., 1896, pp. 4 ff. *B.S.A.*, XIII, p. 435, *note*.

‡ 'Εφ. 'Αρχ., 1888, pp. 164 ff., and Pl. II. Another fragment is in Tsountas and Manatt, fig. 15.

Mykenische Vasen. Pl. XLI, 425, 427, 429. From Mycenae. Warriors.

Mykenische Vasen. Pl. XLI, 423, 424, 428. From Mycenae. Animals.

Schliemann, Tiryns. Pl. XIV, XV, XVIIb, XIXa, XXIa, b. XXIIe. Chariots, horses, warriors.

Of the above examples most belong to Furtwängler's Fourth Mycenaean Style, but some are placed by him in the Third.

'Εφ. Ἀρχ., 1895. Pl. X, 12, 13. From Markopoulo. Figures.

„ „ 1895. Pl. X, 9. From Markopoulo, Shape only.

„ „ 1895. Pl. XI, 4. From Nauplia. Beasts.

„ „ 1904. Pl. From Muliana. Figures.

The Cypriote Mycenaean craters, though at first thought to be later than any Mycenaean remains on the mainland, are now commonly admitted to be Mycenaean in date as well as in style.* This in itself would tend to put the Warrior Vase into the Mycenaean sequence, but the point at issue is rather whether the innovations to be seen on the Warrior Vase foreshadow the Geometric period. That the innovation in its painting takes the form of figure drawing, and not of geometrical patterns, seems to me conclusive. The first signs of a geometric age should rather be geometric;† and the Dipylon vases with chariot scenes are in fact later than those with purely linear designs. Some of the pottery from Tiryns, on the other hand, seems to be transitional to the geometric style; the human figures represented on it are unlike those on the Attic Dipylon vases, and its other decoration is geometrical.* There are also differences to be seen in the paint and technique. These Tirynthian sherds, I suggest, may form a link between the Warrior Vase phase of Mycenaean pottery and the geometric style.

THE USE OF IRON IN HOMER

Before examining archaeological evidence for the earliest appearance of the peculiarly Homeric armour, a brief digression is needed on the vexed question of the usage of iron in Homer. Iron

* A. J. Evans, *Journal of the Anthropological Institute* (hereafter *J.A.I.*) XXX, pp. 199 ff. Furtwängler, *Berl. Philol. Wochenschr.*, 1901, p. 141 ff. Poulsen, *Jahrbuch* 1911, pp. 247 ff.

† For fuller arguments cf. Mackenzie, *B.S.A.*, XIII, pp. 428 ff.

* E.g., Tiryns, Pl. XXXIIIa.

is mentioned twenty-three times in the Iliad, and of iron the following objects are made. A club, perhaps only studded with iron (H 141); an arrowhead (Δ 123); the gates of Tartarus (Θ 15); the axle of Hera's chariot (E 723); knives (Σ 34, Ψ 30). In the other passages iron is used in a metaphorical sense or referred to in an unworked condition. In Ψ 30 $\sigma\iota\delta\acute{\eta}\rho\varphi$ is used for an iron weapon, but as the passage refers to the cutting of an animal's throat, a knife is presumably meant; in Σ 34, where Achilles cuts the throat of a captive youth, a knife also seems the natural weapon. There is no mention of iron swords, and wherever the metal of a sword is specified it is bronze. In Homer, as several authorities have pointed out, iron is still the agricultural weapon; it is not yet trusted for warfare. The Halstatt iron swords often used to illustrate Homeric weapons belong to a later age. Although in the present paper it is my aim only to see how far the Homeric poems compare accurately, or not, when taken in their simplest interpretation, with the archaeological evidence, one theory as to iron in Homer must be noticed because it is at once so comprehensive and so plausible. Professor Ridgeway argues that in Homer iron is in general use 'for all kinds of cutting instruments and for agricultural purposes,' and, according to him, Homeric swords were normally of iron. His argument for this view is briefly this: The word for bronze, the older metal, became identified with the weapon itself and continued to be used in the meaning of 'weapon' when the weapon actually referred to was made of iron. To illustrate this he quotes the English phrase, 'to smite with the steel'; but though this phrase illustrates the use of the name of the metal for the weapon, it also reveals the weakness of the whole theory. To be a genuine parallel it should be 'to smite with the iron.'* The theory then that Homer describes a full iron age seems not conclusive in itself unless definite archaeological evidence can be brought to support it. At the same time it is quite probable that iron swords were not absolutely unknown to Homer; for, in any account of a transitional age, uniformity of expression cannot be taken to mean absolute

* The much quoted line in the *Odyssey*, 'Iron of itself doth attract a man,' occurs in very suspicious company, and by it it must be judged. Cf. Lang, *World of Homer*, p. 100; Monro, *Odyssey*, XIX, 1-50. notes.

uniformity in practice. Thus Homer tells of bronze swords and iron knives, which means that bronze swords and iron knives were usual; exceptions probably existed but were not worth mentioning. Homer describes characteristic features; he does not give a complete list of all varieties for the benefit of later commentators.

Nearly all the evidence collected below has been noticed previously, but much of it has been passed over in recent considerations of the Homeric age. An attempt to collect it may therefore be justified.

The following instances exemplify the use and knowledge of iron in the Mycenaean age:—

In the Second Late Minoan Period.

An iron ring from the Vaphio tomb. *Cf.* 'Εφ. 'Αρχ., 1889, p. 147.

An iron ring from a tomb at Kakovatos. *Cf.* *Ath. Mitt.*, 1909, p. 275.

In the Third Late Minoan Period.

Two iron rings from tombs at Mycenae. *Cf.* 'Εφ. Αρχ., 1888, pp. 135, 147.

Iron pin with ivory handle. Enkomi. Tomb 74. *Cf.* *Excav. in Cyprus*.

Iron knife with ivory handle. Enkomi. *Cf.* *Excav. in Cyprus*. Fig. 25, No. 1482.

Iron knife with ivory handle, and one iron fragment. Enkomi. Tomb 58. *Cf.* *Excav. in Cyprus*. Pl. II, 995. [p. 31 says 'two iron knives,' but only one exists.] This tomb, according to Poulsen, is one of the later in the cemetery; he suggests XII-XI century for its date. *Jahrbuch*, 1911, p. 247.

Traces of an iron object in a Mycenaean tomb, at Mulianà, in Crete; bronze bosses and bronze swords of a late type were also found. *Cf.* 'Εφ. 'Αρχ., 1904, p. 2 ff.

In another tomb at Mulianà were two burials, one inhumation of late Mycenaean date, and one cremation, usually described as of the 'geometric' age; to this burial are attributed an iron sword and a knife. The ashes were in a crater which is a degenerate example of the Warrior Vase type.

As soon as 'geometric' pottery begins iron becomes commonly

used for weapons, and in tombs at Kavousi, containing vases still Mycenaean in shape though geometric in decoration, iron swords and spears were found.*

SHIELDS

Although some consider the epithets *κυκλοτερής*, *εὔκυκλος*, *πάντοσ' εἶση*, *ὀμφαλόεσσα* applicable to 'figure-of-8' Mycenaean shields, this view is by no means generally accepted. It is said that *εὔκυκλος*, *πάντοσ' εἶση* and *ὀμφαλόεσσα* indicate round shields, and particular stress is laid on the last of the three epithets. Thus, Professor Ridgeway regards the explanation of *ὀμφαλόεσσα* by certain small disks found in the shaft graves at Mycene, perhaps derived from the rims of shields, as highly improbable.† He points out that *ὀμφαλος* means 'navel' and so can only properly refer to a 'central boss.' Two passages are quoted to support this view. 'ὁ δ' ἄρ' ἀσπίδος ὀμφαλον οὔτα' (N 192). This may mean 'It struck a boss of the shield.' The other passage is fortunately more definite (Λ 32 ff.). The shield here described has one *ὀμφαλος* in the middle, and around it are 'ten circles of bronze with twenty *ὀμφαλοι* of tin.' This shield I believe to have been round, and very probably to have come from Cyprus where, as will be seen, round shields were in use. But since even a round shield can have only one centre, the twenty other *ὀμφαλοι* cannot also have been 'central bosses.' Telamonian Ajax had a shield like a tower. This may have been a great oblong Mycenaean shield or possibly a figure-of-8 shield. The former, perhaps, seems more natural. No one, I believe, suggests it was round, yet in H 267 it is hit *μέσσον ἐπομφάλιον*. Thus *ὀμφαλος* and *ὀμφαλόεσσα* whenever they occur need not always indicate round shields, Figure-of-8 shields with *ὀμφαλοι* are seen on Mycenaean rings;‡ bronze bosses, perhaps from round shields, were found in a late Mycenaean tomb at Muliana.§ The early evidence for round shields has recently been collected by Helbig to whose paper I refer.|| His

* *American Journal of Archaeology*, 1901, pp. 132 ff.

† *Op. cit.*, p. 319.

‡ E.g., Tsountas and Manatt, p. 181, fig. 75.

§ 'Εφ. 'Αρχ., 1904, p. 45, fig. 11.

|| Helbig, *Jahreshefte*, XII, pp. 1 ff.

reconstruction of the bronze figurines seems very plausible. A round shield appears on the Phaistos disk; this, however, is not Minoan, but its significance will be referred to later. The shields on the painted stele from Mycenae and on the Warrior Vase are often considered round, though they are not in the latter case truly circular. One sherd in the Warrior Vase style§ shows a circular shield; and there is another example on an ivory handle from the Mycenaean cemetery at Enkomi.¶ A fragment of porcelain from the Third Shaft-grave at Mycenae shows a warrior with a round shield and a helmet with horns. This object may be of Cypriote origin.

Round shields, then, though rare, occur before the end of the Mycenaean age. The argument as to the non-existence of blazons in Homer and their existence in the Mycenaean age is largely a question of when a blazon is not a blazon but a purely decorative ornament. If the 'gorgon of fell aspect' on Achilles' shield is not a blazon, there seems little reason why blazons should be attributed to Mycenaean shields. The archaeological evidence is extremely slight; a few stars or decorative bosses, and perhaps the lion mask and silver ox head from Mycenae, all of which are very uncertain.|| I can find no clear examples of blazons before the 'geometric' period, when they can be seen on late Dipylon vases.

GREAVES

In Homer the Achaeans are often called *εὐκνήμιδες* and once *χαλκοκνήμιδες*. Greaves or leggings are frequently represented in Mycenaean art;** they can be seen on the Warrior Vase and on the painted stele. They were fastened on below the knee and round the ankle. The material of which they were made cannot be determined; on the painted stele they are blue-grey like the corselets, but the colour may be conventional. A pair of bronze greaves, however, were found in a Mycenaean tomb in

§ *Myk. Vasen*, Pl. XLI, 427.

¶ A. J. Evans, *J.A.I.*, XXX, pp. 209, fig. 5, 213 ff.

|| Ridgeway, *op. cit.*, p. 305 ff.

** On rings, cf. Tsountas, *Μυκῆναι*, Pl. V, 4, 5. 4 is from the third shaft-grave. On gems, cf. *Myk. Vasen*, Pl. E, 30. On sherds analogous to the Warrior Vase, cf. *Myk. Vasen*, Pl. XXXVIII.

Cyprus* with a typical Mycenaean sword. These greaves were fastened on by wires. Metal greaves are, therefore, Late Mycenaean. The 'Mycenaean' designs on some of the greaves from Glasinatz† make it quite possible that the usage of metal greaves spread from south to north.

SPEARS

No attempt has been made to differentiate the blades of Homeric spears from those found in the Mycenaean age. All Mycenaean spears are of bronze, and Homer never mentions a spear of iron. The sockets of many of the late Mycenaean spears are joined at the side and pressed firmly on to the shaft by a thin bronze band.‡ In many examples, owing to rust and corrosion, this band appears to be joined to the socket. With this form of fastening, compare Hector's spear with its three bands of gold (Z 320). The spears from the shaft graves are of a different construction, the socket is solid and has no band. A distinction has been drawn between the butts of Homeric and Mycenaean spears; *οὐριάχος* (N 443, Π 612, P 528) need mean nothing more than 'the butt end'; it may, however, as Ridgeway suggests, mean a knob: *σφυρτήρ* (K 153) must mean a spike. The word itself occurs only once in the Iliad, but a spike is implied elsewhere. A spike at the butt, as is well known, appears on the Warrior Vase, and there are actual spikes, probably from spears, from Nauplia and Mycenae.§ From their provenance these should be of Late Mycenaean date. An iron spear head, with other iron weapons, was found in a tholos tomb at Kavousi, with vases still largely Mycenaean in style but under strong geometric influence.||

HELMETS

Homeric helmets seem to have been of various shapes, and many of their varieties cannot be accurately defined. One kind (K 261) was made of leather strengthened on the outside by boar's teeth

* *Brit. Mus. Cat. Bronzes*, No. 74. *Excav. in Cyprus*, p. 16, cf. *J.A.I.*, XXX, p. 214.

† For the importance of these Mycenaean motives, cf. A. J. Evans, *J.A.I.*, XXX, p. 217.

‡ There is a good example from Nauplia in *Nat. Mus.*, Athens. The same device appears on a spear from Ialysus, *Myk. Vasen*, Pl. D, 12.

§ *Athens Nat. Mus. Cat. of Mycenaean Collection*, 2554, in type like the Glasinatz example figured in *Early Age*, p. 432. For a possible example from Crete, cf. *Mon. Antichi*, XIV, p. 466, fig. 73 f.

|| *A.J.A.*, 1901, pp. 132 ff.

strung together. Several representations of this kind have been found in tombs of the Third Late Minoan Period at Mycenae, Spata, Menidi and Enkomi, and a number of actual boar's teeth bored at the end have also been found. No trace of this kind of helmet has yet occurred in a deposit of the 'geometric' age. The epithets applied to helmets in Homer are important; they fall into two classes, those whose meaning is more or less obvious and those whose meaning usually depends on the Homeric views of the translator. I take the first class first: χρυσείη, χαλκοπάρηος, πάγχυαλκος. These epithets must imply metal helmets and metal cheek pieces, and the interpretation by leather caps with metal plates or bosses seems niggardly. The helmets on the Warrior Vase may be of metal, but they have no cheek pieces.

A few sherds of approximately the same date seem to show helmets with cheek pieces, but the drawing is very crude. On the large steatite vase from Hagia Triadha, however, a helmet, almost certainly of metal and with cheek pieces, is clearly portrayed. The likeness the helmet bears to the later classical types is in many ways remarkable, but as to its early date there is no doubt.

Τρυφάλεια, τετραφάληρος, φάλος, ἄφαλος, ἀμφίφαλος, τετραφαλος and φάλαρα are all obscure. Φάλαρα, (Π 106) in later times meant a boss or ornamental plate. What the spots on the Warrior Vase helmets may mean cannot be definitely decided. Φάλος according to Helbig, Ridgeway, and others, is the later κῶνος or ridge across the helmet into which the crest was fixed. Others, however, translate 'horn-like projections,' which seems better on account of N 132, where 'projections' are essential. The helmets on the Warrior Vase have horn-like projections, and also the helmet on the porcelain fragment referred to above from the Third Shaft-grave.

BREASTPLATES

The warriors on the fresco, the painted stele, and the Warrior Vase from Mycenae, as well as those on several sherds of the same date, are wearing breastplates. The precise form and material cannot, however, be determined. Corselets appear on the Knossian tablets, and may also be recognised on a few gems.* The carved

* *Corolla Numismatica*. 1906, p. 357. *Discoveries in Crete*, p. 37.

ivory from a Mycenaean tomb at Enkomi, already referred to in connection with the round shield, gives an excellent representation of the Homeric warrior's outfit, as was pointed out not long after its discovery. 'Here, as in the Iliad, the belt or girdle—the Homeric ζωστήρ—which seems to have been fastened behind, follows the lower rim of the cuirass Just, too, as in the Epic we see that ζωστήρ reinforced by a second belt—ζῶμα—with its belt plate or μίτρη, so on the ivory relief there is seen a double raised ring around the warrior's waist.'*

DRESS

For costume, as opposed to armour, there is little direct evidence. It is clear that Homer does not describe the loin-cloth costume of the early Mycenaean men, nor the bodices and skirts of the early Mycenaean women. But before the Mycenaean age ends, a change in costume occurs. With one exception, from Curium,† none of the Cypriote Mycenaean craters show the skirt-and-bodice costume. The costume there indicated is probably the same as that worn by the woman on the Warrior Vase, and this, as Ridgeway has pointed out, resembles that of the Achaean dames.‡ Since fibulae are intimately connected with certain types of costume, the date at which they first appear may be used as evidence for a change in dress. Men clad in trailing robes are not unknown in Mycenaean art,§ and the figures in the chariots on the Cypriote craters are clad in costumes which, if male, are different from the normal costume of the earlier Mycenaean period. There is, therefore, evidence for a change in costume towards the end of the Mycenaean period, which may fulfil the Homeric requirements.

FIBULAE

The occurrence of fibulae in the Third Late Minoan Period is well substantiated by the finds from various sites. The precise date in that period at which they are first found is difficult to determine; though on the mainland of Greece and in Crete a late date is

* A. J. Evans, *J.A.I.*, XXX, p. 274.

† *Excav. in Cyprus*, p. 73.

‡ Ridgeway, *Early Age of Greece*, p. 299.

§ *Antike Gemmen*, Pl. II, 39, 47.

tolerably certain. The northern origin of the fibulae, which is the theory most commonly held, may perhaps be questioned. It is apparently based on the view that the past history of the fibula can only be found in the north, and that the fibulae at Mycenae are chronologically earlier than those found in Cyprus, but at the same time it is recognised that whether northern or no the examples from Mycenae are not of a very early date.* The fibulae, both from Mycenae and from Cyprus, are, however, so primitive in form that they are clearly only recent inventions, so that the invention of the fibula and its use in the Aegean are not separated by any great space of time. Straight pins with holes or loops have been found in Cyprus, and it has been suggested that the fibula was evolved out of these; but this theory is rejected by Professor Ridgeway, who derives the fibula from straight pins with a spiral twist, such as are found at the head of the Adriatic. This derivation may be correct, but as similar pins have been found at Mycenae† a northern origin is not necessarily implied. In Cyprus fibulae similar to those from Mycenae occurred at Enkomi,‡ where several craters, with figure decoration showing a change from the old Minoan dress, were also found. At Curium, together with Mycenaean vases (which though L.M. III, are not apparently late products of that period) was a crater of the Warrior Vase shape, but with figures on it in the old Minoan costume; with this crater was a fibula.§ The fibula in Cyprus, therefore, coincides with the appearance of the crater shape, and the older costume on this one example is a survival, and was probably not worn by the owner of the tomb. The Cypro-Mycenaean crater, the fibula, and a new costume, appear at the same time and come probably from the same direction. On the revised and now generally accepted dating for the Cypriote finds, the fibulae at Mycenae must either be put early in L. M. III or else, if kept for a late period in it, be considered chronologically later than those in Cyprus. The types of the Enkomi examples are very similar to those from Mycenae; the Curium type is almost triangular in shape owing to the height of the stilt; but though it is thus typologically

* Cf. Ridgeway, *op. cit.*, pp. 752 ff.

† 'Εφ. 'Αρχ., 1888, Pl. 8.

‡ *Excav. in Cyprus*, p. 68, A. J. Evans, *J.A.I.*, XXX, p. 204.

§ *Excav. in Cyprus*, p. 73, fig. 127. A. J. Evans, *op. cit.*, p. 204. J. L. Myres, *Liverpool Annals*, 1910, p. 140.

closer to the iron age bow-fibulae than the examples from Enkomi it may still belong to an earlier age. It belongs probably to another series of types. There is then some evidence in favour of the view that the fibula came into the Mycenaean world from the direction of Cyprus.

SWORDS

We have seen that the view that Homeric swords were usually of iron is not self-evident. Homeric warriors used the cut as well as the thrust; the former is mentioned twenty-four times, the latter eleven. This proves that both methods of attack were in vogue, but it does not prove that the one was commoner than the other. A great warrior would naturally employ the newest mode of fighting and would also have the newest type of weapon. A cutting sword differs from a thrusting sword, and was a late development in the Aegean. Homer, moreover, is mainly concerned with great warriors. It is frequently argued that the change from a thrusting sword to a cutting sword implies a change from bronze to iron. It is said, for example, that it was only by the discovery of iron that the warrior was furnished with a strong sword with which a blow could be dealt without the danger of the blade snapping at the hilt;* but if this is so there should be a difference in type between the latest bronze swords and the earliest of iron. This, however, is not the case, the sword type changes before the metal and the early iron swords are of the same type as the immediately preceding swords of bronze.† The difference between a cutting and a thrusting sword lies in the nature of the blade and in the hilt.‡ Length has little to do with the matter. The long rapiers from the shaft graves are suitable only for thrusting, but the broad-bladed swords of the later Mycenaean period could be used for a cut. Odysseus had a *τανύηκες ἄορ*; this was more probably a long rapier than an iron sword from Central Europe. A broad-bladed cutting sword is seen carried by 'Minoans' on the Senmut tomb. Mr. Hall in his account of this fresco, comments on its large size, but suggests that like the

* Ridgeway, *op. cit.*, p. 303 ff.

† *Prehistoric Tombs of Knossos*, p. 113. *J.A.I.*, XXX, p. 218.

‡ This can be demonstrated by experiments with paper knives with solid handles and those with fancy handles.

vases it may be exaggerated.* If, however, the drawing is in proportion the blade of this weapon is still considerably under three feet in length.†

ARROW HEADS

In Homer one arrow is of iron.‡ The Mycenaean examples are of obsidian, flint or bronze.§ Many are barbed and were fastened on by a sinew or string. The barbs of Homeric arrows must have been thin; they bent when being pulled out of a wound.|| A common Mycenaean type answers to these requirements, which is barbed and made out of a thin and flat piece of metal.

CHARIOT WHEELS

It is doubtful whether the arguments¶ based on the eight-spoked wheels of Hera's chariot can be proved either way. Eight-spoked wheels are by no means universal in the districts where the home of the Achaeans has been found. In the Aegean, in all periods, four spokes are the usual number in representations of chariots, and their appearance consequently in later times can hardly be used as evidence for Pelasgian survivals. The number of spokes represented was probably largely an artistic convenience.** Models of four-spoked, six-spoked and eight-spoked wheels have been found at Mycenae in Late Mycenaean surroundings.††

HAIR‡‡

It is also doubtful if the 'κάρη κομόωντες' Achaeans and the 'ὄπιθεν κομόωντες' Abantes could be distinguished on the monuments unless the latter wore a very definite form of pigtail. Further, there are no monuments which can be attributed to the

* *B.S.A.*, XVI, pp. 254 ff.

† It reaches from the top of the head to just below the top of the belt. For the man's height I have assumed the very liberal allowance of 6 feet.

‡ Il. Δ 132-140.

§ *Prehistoric Tombs of Knossos*, p. 32.

|| Il. Δ 214.

¶ Ridgeway, *op. cit.*, pp. 325 ff. It is, of course, an assumption that Hera's chariot was typically Achaean.

** If, however, representations are to be trusted, eight-spoked wheels seem common in the East. Compare for a later date Sidonian coins.

†† In *Nat. Mus. Athens Cat. of Mycenaean Collection*, No. 2592, 2600.

‡‡ Ridgeway, *op. cit.*, p. 327.

Abantes in particular. Metal spirals, probably for the hair, have been found in several Mycenaean tombs. These are quoted to prove that these tombs are not Achaeae. Spirals of the same kind also occur in the sub-Mycenaean cemetery at Salamis, where cremation is known. The reason for believing that the use of spirals for the hair is not Achaeae is the description of Euphorbos, a Trojan and not an Achaeae, with his locks bound with gold and silver. Nastes, however, also not an Achaeae, went to the war adorned with gold. This probably refers to ornaments in his hair; it cannot refer to his armour, and the line ends in contempt, 'ῥύρε κούρη' (B 872). The inference is that Achaeae women bound their hair in golden ornaments although the men did not. Gold spirals are consequently no evidence *against* Achaeae unless they are found in men's graves. On the other hand, they are not by themselves evidence *for* Achaeae since other races also used them.

Early Attic tradition has been invoked on this and several Homeric questions. There is, of course, good literary evidence for believing Attica to have been Pelasgian in the sense that it was never conquered by alien invaders, but, on the other hand, Attica not only welcomed refugees from all quarters, but made them citizens.* To separate the Pelasgian element from the rest in Attica is therefore more difficult than in the case of other states.

CATTLE

Homer, it has often been suggested, seems to know of two breeds of cattle, one short-horned and the other long-horned. The long-horned type is very common in Mycenaean art, but the short-horned type is also known, and appears on the Cretan hieroglyphs. 'This seems to be an indigeneous species, of which skulls were found in the votive deposits of the Dictaen cave, and to which Professor Boyd Dawkins has given the name of *Bos Creticus*. It is allied to the *Bos longifrons* or "Celtic Short-horn".'† To this type may belong the 'calves' and the gold pendants from a tomb (L. M. III) at Hagia Triadha‡ and the seven ivory heads from the town at Mycenae.§

* *Thuc.* I, 2.

† *Scripta Minoa*, p. 206.

‡ *Mon. Antichi*, XIV, p. 729, figs. 27, 28, 29.

§ *Nat. Mus. Athens Cat. Mycenaean Collection*, No. 3046.

BURIAL

In this section I hope to show that there are already some signs that cremation was practised in Greece before the 'geometric' age, and that this practice is not necessarily connected with the appearance of geometric pottery. That burnt geometric burials are found in a later period is no evidence against this view, as the practice of burying the dead is of a more permanent nature than a style of vase painting. In view of the attitude of despair at the lack of Homeric cemeteries some explanation is needed. It will presumably be admitted that there was a transitional period between the pure Mycenaean and geometric styles in which men died and were buried, though hardly any graves at all, Achaeae, Homeric or otherwise, have been found. The reason for the want of evidence is briefly this. At the end of the Mycenaean age there was a great shifting of habitation. Cities and towns were deserted and their positions moved, sometimes only a short distance, but at times the new sites were entirely separate. Sparta is a good example. The result has been that the latest deposits of the older age have been much destroyed by weather and exposure, so that for this period, which happens to be all important, cemeteries are at times the only surviving evidence. Cemeteries, however, are either very difficult to find or else, if easy, nearly always prove to have been plundered in antiquity. There is a lack, not of Homeric graves, but of graves of any kind which fall into what was probably the Homeric age.

In the Mycenaean cemetery at Nauplia cremation in a few cases seems to have been employed. This has, however, been suspected, I give, therefore, the references to the literature on this point and leave it an open question.*

At Moulana, in Crete, a tholos tomb was found containing two burials, probably not very far removed from each other in date. To the earlier (inhumation) burial are attributed† late Mycenaean vases and bronze fibulae, and to the later burial (cremation) some vases that may be called 'geometric,' and an iron sword and knife; the burnt bones were in a crater of the Warrior Vase type. This burial I should call post-Homeric on the grounds of the iron

* *Myk. Vasen*, p. 45. 'Αθήναϊον VII, pp. 183 ff., VIII, pp. 517 ff.

† A peasant moved the objects before the tomb was scientifically examined. 'Εφ. 'Αρχ., 1904, pp. 2 ff.

weapons; others will disagree, but this point cannot be settled until further evidence is found. If the fibulae go with the earlier burial, knowledge of fibulae is certain for the period of the later. The iron weapons, as well as the geometric vases, show that the crater is late in the class to which it belongs. This might perhaps be deduced from its style, but since Crete at this period was unimportant, the very degenerate decoration might be due to other reasons. The crater then represents the earlier elements in this burial, and the geometric vases and iron weapons the later. One of these geometric vases is in shape and decoration almost identical with the very early geometric vases from Theotokou in Thessaly,* which are found in tombs where there is no trace of cremation at all, so that the geometric influence in this tomb does not seem to account for the cremation. The crater, therefore, is a cremation crater not by chance but by design, and the rite of burning as well as the crater belong to the earlier elements in this transitional tomb.

Cremation may be the intention of all the Mycenaean craters of this type.

In the very late Mycenaean or sub-Mycenaean cemetery, on the island of Salamis,† cremation and inhumation were both practised. Unfortunately, all the burials were poor, and there is no evidence for weapons. Bow fibulae were found, and the vases, though in many cases still of Mycenaean shapes, were decorated with geometric designs. There can be little doubt that the geometric style was in vogue in Greece at the time to which this cemetery belongs. It has been claimed by different writers as Achaeae and as Dorian, but it may be questioned if cremation was a Dorian rite.

On the theory developed in the present paper it would be Achaeae in rite though early Dorian in date. Except in the case of the big craters, only probably available for the rich, no distinction seems to exist between 'Achaeae' and non-Achaeae Mycenaean pottery. The Achaeae introduced certain innovations into Mycenaean civilisation, but did no more. This is clear from the Homeric poems in which the whole background is Mycenaean, and so detailed that it is not remembrance of a bygone age but the account of a vivid present. How far cremation was universal among

* For the connections of the *Thessalian Geometric* with Crete cf. *Prehistoric Thessaly*.

† *Ath. Mitt.*, XXXV, pp. 17 ff.

the Achaeans, or how numerous Achaeans were, is very doubtful. Homer only describes the funerals of great chieftains. The tombs at Kavousi which contained iron weapons, contained vases somewhat analogous to those from Salamis, but more 'geometric' perhaps in style. The number of weapons found show that iron was by that time common. These tombs are consequently post-Homeric. None of the bodies were cremated.

SUMMARY

Having examined in order the evidence for the more important features in Homeric armour and life, which have been used to differentiate it from the Mycenaean age, we may now summarise the results. If by Mycenaean is meant only up to and including the Shaft graves at Mycenae (L.M. I, L.M. II), Homeric armour is, in the main, not Mycenaean at all; nor does it coincide with the earlier part of the next period (L.M. III), at least in Crete and on the mainland of Greece. A change, however, occurs in the Third Late Minoan Period, and in a late phase of this period, before the 'geometric' style of pottery begins, the raw material for Homeric armour, such as round shields, cutting swords and metal greaves, is to be found. In other words, the criteria for Homeric armour in view of later discoveries are now seen to exist in an earlier period than had often previously been thought. Despite the important changes in armour, costume and in certain other features, this late phase of Mycenaean civilisation is very closely connected with the preceding age; the civilisation is, in fact, still Mycenaean, though many innovations have been imposed upon it from without. The chief ceramic changes are a few new vase types and the use of figure decoration in vase painting; but the point to be decided is whether this foreshadows the 'geometric' style or not. Dr. Mackenzie, after a detailed examination of the pottery decides against 'geometric' influence; and the fact that the chief innovation in the pottery consists of the use of human figures, and not in new geometric patterns, is strong evidence that this view is correct, and that this change is in no sense due to the creators of the Dipylon style, for in the series of vases from the Dipylon cemetery figure decoration is admittedly a sign of a late rather than of an early date.

The concomitant phenomena of this late Mycenaean period of vase painting are all important. The view that the Third Late Minoan Period is a period of degeneration requires modification in many important respects, for towards the end there are signs of an artistic revival in vase painting, and the characteristics of this age, as a whole, when compared with the age that preceded it, include a great abundance of ivory, glass paste and amber. Amber, a definite case of importation from the North, was perhaps bartered for ivory, an equally definite importation from the East. For the latter half of the Third Late Minoan Period the extent of the East may be limited. Furtwängler's fourth Mycenaean vase style is hardly if at all represented in Egypt, and the break thus indicated in trade between Egypt and Greece seems to continue until near the end of the age of Greek 'geometric' pottery. The East may, therefore be restricted to Anatolia and the lands adjacent to Cyprus. The designs on the Mycenaean ivory mirror handles—mirrors are an innovation in L.M. III—though they recall Egyptian models are not purely Egyptian, and probably only influenced by Egypt, perhaps indirectly. It is also noticeable that for many of the requirements of Homeric armour we have had recourse to Mycenaean Cyprus. Apart from amber it is difficult to decide how much definite northern influence exists in the Third Late Minoan Period. Although the general use of iron in the Dipylon age coincides with an invasion from the north, the first knowledge of iron in Greece may easily have been derived from another quarter. The archaeological evidence for iron in the Mycenaean age has been already noticed, and with it may now be compared the legends of the Telchines and Dactyls, who are never located in the north-west. Rhodes and Crete have a strong claim to these mythical metal workers. There seems now to be no doubt that iron was known, though not commonly used, in Egypt from a very remote period, so that Greece may have first acquired iron from Egypt, and the parallel, often previously suggested, between 'ba-n-pet' and 'σιδήρεος οὐρανός' tends to support such a view. If the revised and earlier dating for the Mycenaean remains in Cyprus is correct, the northern origin of the fibula is still far from certain, the more especially as there is evidence for the extension of Mycenaean designs up to the head of the Adriatic and

beyond. Ivory is found at Halstatt, the Mycenaean motives on the greaves from Glasinatz have already been noticed, and decoration in the form of zones or friezes of animals was probably employed in Mycenaean art before it reached more northern Europe.* Round shields, on the existing evidence, seems to appear in Cyprus and in the east before they are found in Greece, and an eastern rather than a northern origin is consequently indicated.† The Mycenaean cutting sword, as opposed to the earlier rapier type, is usually regarded as of European origin, and at present the evidence is in favour of such a view. It is, however, important to notice that this change in type does not coincide with a change in metal, and that broad-bladed swords were used by the Shardina.

Although many of the changes in armour and costume are particularly noticeable in Mycenaean Cyprus, it is clear that they cannot have originated in that island, and that if they appear earlier there than in Greece itself their home must be looked for somewhere in Anatolia or even further east. It is necessary, therefore, to see what evidence, if any, exists to support such a view. There are good grounds for believing that the Phaistos disk is Anatolian and, moreover, from a region not far remote from Lycia, owing to the marked resemblance between the forms of the later Lycian tombs and the pictures of certain buildings seen on the disk.

Other resemblances have been recognised between it and certain objects from Cyprus. Thus round shields and a form of head-dress are common to the disk and to the Enkomi ivories. The absence of pinched narrow waists and the existence of a short tunic unlike the normal Minoan loin cloth, are also points of resemblance.‡ In this connection the series of bronze male figurines, recently restored very plausibly by Helbig, by the addition of a round shield deserve notice. Their round shields are, of course, problematical; but their conical helmets, ending in a knob, seem to be of the same type as certain of those on the ivories from Cyprus. These figures also wear

* Cf. ivory pyxis from Menidi. *Das Kuppelgrab bei Menidi*, Pl. VII. A similar pyxis is seen on the fresco from Tiryns.

† Helbig, *op. cit. passim*, but compare Ridgeway, *op. cit.*, pp. 453 ff. for a Northern origin. Round shields were probably indigenous in both regions. The first round shield in Greece, I think, came from the East; the Dorian round shields, on the other hand, connect with the North rather than any other region.

‡ *Scripta Minoa*, p. 25.

a short tunic, which is not quite the Minoan loin cloth, and their waists are not pinched. If provenance is of any value their home should be on the mainland opposite Cyprus, but in view of current theories it is necessary to add that there are no grounds as yet for considering them Phoenician. The costume in itself is strong evidence against it. It is more probable they have the same general origin as the disk itself. The possible Anatolian origin of many of the types of armour discussed above in no way prevents them from being Achæan. The northern origin of the Achæans is a theory mainly based on archaeological evidence, and there is, I believe, no literary evidence to support it, which cannot be otherwise explained. Greek tradition never brings the Achæans from the north, and is almost silent as to their origin.* Pelops, according to legend came from Anatolia, and a Hittite origin for him has been suggested.† In the Egyptian records the Akaiuasha are mentioned together with the Turusha, Shakalesha, Shardina and Luka, the last three of whom are identified with Sagalassi, Sardians and Lycians. The identification of the Turusha with the Tylissians of Crete has also been suggested but does not seem certain.‡ Although it is quite possible that the Akaiuasha of the Egyptian records may have come from the mainland of Greece, a position in or near Anatolia would be more natural. If, too, of Anatolian origin their migration thence into Greece may have been part of the same movement that brought them into conflict with Egypt, and this conflict also may have caused the break in trade relations between Greece and Egypt which can be observed towards the end of the Mycenaean age. The records of the Akaiuasha belong to the reign of Merenptah, 1235-1214 B.C., a date not incompatible with the traditional Greek date for Pelops who came from Asia.

* T. W. Allen, *Classical Review*, XXV, pp. 233 ff.

† H. R. Hall, *J.H.S.*, 1909, pp. 19 ff. Ridgeway, in *Minos the Destroyer, etc.*, now brings some Achæans from the East. There is, however, no break in culture at the beginning of L.M. III.

‡ Another suggestion is with a tribe near Tarsus.

CATALOGUE OF JETTONS OR CASTING-COUNTERS, FOR USE ON THE COUNTING-BOARD OR CHEQUER, AT THE INSTITUTE OF ARCHAEOLOGY IN THE UNIVERSITY OF LIVERPOOL

BY PROFESSOR F. P. BARNARD

- 1.—*Obverse*. A conventional king's head, full-faced, within a circle: a border of pellets in lieu of a legend. *Reverse*. A short cross recercelée, within a circle, cantoned by four pellets; a border of pellets. Both faces are mute, as is usual with this class of counter. Size, according to Mionnet's scale, $4\frac{1}{2}$. All the coins in this list are of latten, bronze, or copper, unless otherwise specified. An English, or Anglo-French, jetton of the Sterling Type: last quarter of the 13th century. (*Cp. La Tour, Collection Rouyer*, 1899, No. 677; Snelling, *View of Jettons*, 1769, Pl. I, 10.) These pieces were not understood by Ducarel, who called them Black Money (*Anglo-Gallic Coinage*, 1757, p. 100, Plates XIV, 35, 36, XV, 41), confusing them with the French *Denier Noir* of unplated billon, or *Zwaarte*, as it was called in the Low Countries. [Pl. I, 1.]
- 2.—*Ob*. As that of No. 1. *Rev*. A long cross recercelée, cutting the inner circle, cantoned by roses; a border of pellets. Each face is mute, the place of a legend being occupied by pellets. Size 4. This and No. 1 are of the same class, and perhaps were struck at the famous Tournay Mint. Many of these counters of the Sterling Type are found partly or wholly pierced (as both Nos. 1 and 2 are) in the middle. Since repeated proclamations and statutes (*e.g. Statutum de Moneta*, 1292) ordered that false coins were, on detection, to be bored through the middle, it may be that these were issued in that state to prevent their being plated and passed as silver pennies, as the above mentioned Black Money often was. The proverb *Faux*

comme un jeton points to such practices, as does the distich: *La bourse pleine de gettoers, Pour dire qu'ils ont de l'argent*, from Coquillart's *Monologue des perruques*; 15th cent. For an instance of the pillory being inflicted for passing gilded counters as money see Riley, *Memorials of London*, 1868, pp. 418-9, and *Liber Albus*, 1861, p. 521. (Cp. Snel., Pl. I, 1, Rev.) [Pl. I, 2.]

- 3.—*Ob.* An open crown. Legend: AVE MARIA GRACIA P[LENA]. *Rev.* A cross of three strands fleurdelisée and fleuronée pierced with a quatrefoil centre, all within a quatrefoil fleuronée. Legend: AVE G[RACIA] in the spandrels of the outer quatrefoil. Size 6½. Lombardic lettering. Jetton of the 14th century resembling the type of Maine (Feuardent, *Jetons et Méreaux*, 1904-7, I, p. 206), perhaps suggested by that of the *Royal* of Louis IX, 1226-70. (Cp. La Tour, No. 1115; Snel., Pl. II, 14, 15.) [Pl. I, 3.]
- 4.—*Ob.* A heater-shield bearing the arms of France-modern. Legend: AVE MARIA GRACIA. *Rev.* A cross of three strands fleurdelisée pierced with a quatrefoil centre, all within a quatrefoil. Legend: A[VE] M[ARIA], twice, in the spandrels of the outer quatrefoil. Size 8. Lombardic lettering. Fourteenth century jetton, probably from the Tournay Mint. (Cp. La Tour, No. 1175; Snel., Pl. II, 6, 7, 8.) [Pl. I, 4.]
- 5.—*Ob.* A dolphin embowed, to the left. Legend: AVE MARIA GRACIA PLE[NA]. *Rev.* As that of No. 3. Legend: AVE M[ARIA] in the spandrels of the outer quatrefoil. Size 7. Lombardic lettering. A 14th century jetton of Dauphiné, as the dolphin shows. (Cp., Feu., II, p. 481; La Tour, p. 203, and Pl. XXV, 2; Snel., Pl. II, 2.)
- 6.—*Ob.* A king, standing under a canopy, with a long sceptre in his right hand. Legend: AVE MARIA. *Rev.* As that of Nos. 3 and 4. Legend: +AV[E] G[RACIA] in the spandrels of the outer quatrefoil. Size 6. Lombardic lettering. This jetton is copied from a coin-type: that of the French *Royal d'or* from 1322 to 1349. (Cp. La Tour, No. 1093; Snel., Pl. II, 18.)
- 7.—*Ob.* A king seated on a throne, with a sword in his right

hand; by his left knee is a small rampant lion. Mute: in the place of a legend is an ornamentation. *Rev.* A cross fleurdelisée cantoned by quatrefoils. Legend: GLORIA TIBI DOMINE. Size $5\frac{1}{2}$. Lombardic lettering. This jetton appears to copy the type of the *Escu d'or* of Philip VI and John II of France (1328-64), but omits the shield, the lion in the place of which perhaps was borrowed from the *Lion d'or* of the same period. (*Cp.* Snel., Pl. II, 20.)

- 8.—*Ob.* I.H.S. The H is cross-headed. Legend: AVE MARI[S] STELLA DEI MATE [R]. The first letter of *Stella* does duty also for the last letter of *Maris*: the *r* at the end is crowded out, as often happens in legends. *Rev.* A cross fleurdelisée cantoned by quatrefoil flowers issuing from the ends of the cross. Legend: the same as on the *Ob.*, but *Mater* is spelt in full. Size 7. All the lettering is Lombardic. Jetton of a Religious Type, from the Tournay Mint. According to Dugniolle (*Le Jeton Historique des Pays Bas*, 1876, I, Pref. XL) there is evidence that these pieces were issued at the time of the Great Pestilence in the Low Countries, 1338-40, and during the Black Death, 1347-9. Possibly they were blessed, and regarded as amulets. The *Ob.* legend gives the opening words of the Vesper Hymn sung at the Feast of the Virgin, which are an allusion to the supposed etymology of the name Mary in Hebrew, *i.e.* 'Star of the Sea.' (*Cp.* La Tour, Nos. 1446, 1447; Snel., Pl. II, 27, 28.)
- 9.—*Ob.* A Saracen's head, to the right, encircled with a fillet. Legend: AVE MARIA GRACIA PLE[NA]. *Rev.* A bowed cross of two strands fleurdelisée, pierced lozengy, cantoned by cinquefoils; in the centre of the piercing a fleur-de-lys. Legend: + A VE M AR[IA], arranged between the points of the cross. Size $4\frac{1}{2}$. Lombardic lettering. Jetton of the Royal Almonry of France: before 1500. Some examples have as *Ob.* legend *Sarasin svi vraie*. (See Feu., pp. 230-1; La Tour, pp. 207-8, and Pl. XXV, 7; Snel., Pl. II, 22.)
- 10.—*Ob.* A conventional single-masted ship at sea, without sails;

for legend a succession of Lombardic letters devoid of meaning. *Rev.* The arms of France-ancient in a lozenge. Legend: as on the Obverse. Size 7. The familiar jettons of this class were struck at Nuremberg, probably in the first instance for use in Paris, as their *Ob.* and *Rev.* types combined suggest the arms of that city (see on No. 26), and some examples bear the legends, *Voleue la gallee de France*, or *Vive le bon Roy de France*. (See, too, on No. 12.) They spread, however, widely, and are still common in England. The pseudo-legends that appear on many were perhaps due to an intentional avoidance of any particular language on pieces manufactured for cosmopolitan sale. Counters of this pattern were evidently made in great numbers during the 15th and 16th centuries, possibly even a little later, the antique features and lettering being preserved as a convention. On the kindred piece, No. 12, though, which dates from before 1600, we see a step towards realism. These, and other *jetons banaux*, or *jetons de pacotille*, as the French numismatists call them, being generally rude of execution and evidently issued at a low price, are apt to be regarded as beneath notice. Such pieces, nevertheless, which were used by the mass of the population of Western Europe, possess to some extent an even greater human interest than the more artistic and expensive coins struck for the purposes of great families or of government departments and corporations. (*Cp.* Snel., Pl. III, 4.) [Pl. I, 5.

11.—*Ob.* A conventional single-masted ship sailing to the left. The sea is not shown. Legend: SCHIF PFENING NVRENBURG. *Rev.* Similar to that of No. 10. Legend: HANS KRAUWINCKEL GOTES. Size $7\frac{1}{2}$. A less common variety of the class to which No. 10 belongs. Second half of 16th century, the period of Hans Krauwinkel, the most prolific of the Nuremberg makers. From this piece inclusive onwards all lettering is Roman. (*Cp.* Snel., Pl. III, I.)

12.—*Ob.* A similar ship to the last, but with three masts, and with much less conventional rigging. She is sailing to

the left, and the sea is shown. Legend: HANS SCHVLTES ZV NVRENBURG. *Rev.* Similar to that of Nos. 10 and 11. Legend: HANS SCHVLTES NORNBE[RG]. Size $7\frac{1}{2}$. Second half of 16th century. On a counter of the same type, issued by Hans Laufer, of Nuremberg (c. 1610-43), is the legend *Fluctuat nec mergitur*: see on Nos. 10 and 26.

13.—*Ob.* The arms of France-modern in a cartouche shield set on a bracket, ensigned with an arched crown, and surrounded by the Collar of the Order of St. Michael, between two laurel branches. Mute. *Rev.* In the centre, in three lines, is the inscription CAMERA COMPTOR [VM] REGIOR [VM] between two crescents; above is an arched crown, below is H for *Henricus*. Legend: NOSCENDA EST MINERVA SVI. 1557. Size 8. Jetton of the *Chambre des Comptes* of Henry II of France. For the Collar of St. Michael, with its scallop-shells connected by a plexus of chains, and its pendent medallion bearing the image of the Saint, see Favine, *Theater of Honour*, 1623, III, vi, 371. The crescents on the *Rev.* were a device of this king adopted when Dauphin, and continued after his accession, in honour of Diana of Poitiers, and appear also on several of his coins. The *Rev.* legend is perhaps based on *Vulgate: Matt.*, vii, 2; *Marc.*, iv, 24; *Luc.*, vi, 38. (*Feu.*, No. 1722.) [Pl. I, 6.

14.—*Ob.* The union of the Three Estates of the Realm symbolized: *Mars* (the Nobility) and *Justitia* (the Judicature) reconciled by *Pietas* (the Church). At the feet of *Justitia* are the Tables of the Law, at those of *Pietas* the Bible. Legend: AMANS FAVENSQ[VE]. In *Ex.* are two interlaced c's, a device of Charles IX of France, and a pair of olive branches crossed through them. *Rev.* Two interlaced c's, with an arched crown above and a lys below, all between a couple of columns each flanked by a lys. The rest of the field is occupied by palm branches. Legend: PIETATE ET IVSTITIA. In *Ex.* CARO[LVS] IX. Size 8. Medalet-Jetton of c. 1565: probably of German make. The *Ob.* is copied from the *Rev.* of a French Medalet-Jetton of 1564 or 1565, perhaps commemorating the

inauguration of a new *régime*, as the King attained his majority in the former year. The pair of columns and the legend on the Rev. formed the device and motto of Charles IX, godson of the Emperor Charles V, who had taken as a device the Pillars of Hercules. The *Non* (or *Ne*) of the 'Herculean inscription' was supposed to have been removed by Charles V: *Plus ultra Herculeas, Calpen Abilamque, columnas, | Carole, victoris nobile nomen habes.* (Reusner, *Imperatorum Symbola*, 1607, III, 240.) 'Ce type des deux colonnes, avec l'écu de France et la couronne (*cp.* No. 17) nous paraît signifier que la Piété et la Justice sont les soutiens de la royauté.' (Blanchet, *Jetons de Henri II de Navarre*, Dax, 1886, p. 13. *Cp.* Bie, *La France Métallique*, 1636, Pl. 64, xii, and p. 193; Fontenay, *Manuel de Jetons*, 1854, p. 374.)

- 15.—*Ob.* Charles IX of France (1560-74) and his brother Alexander, Duke of Orleans, in Roman armour, standing and holding between them a branch with three lys; the former is indicated by the Gallic Cock, the latter by a wolf. (See his jetton of 1563 in Bie, Pl. 72, i, and p. 213.) Legend: FORTIT[VDO] GALLIA[E]; the latter word is blundered. In Ex. H.K. Rev. Perseus on Pegasus flying in the air to the right; the earth below. Legend: PERSEVS. In Ex. H. KRAV. Size $7\frac{1}{2}$. Medalet-Jetton struck at Nuremberg by Hans Krauwinckel *temp.* Charles IX. The Ob. is copied from the Rev. of a French Medalet-Jetton of 1566. For the type of the Rev. *cp.* Symeon's *Vita et Metamorfoses d'Ovidio*, Lyons, 1559, p. 72, whence it was perhaps taken. It appeared later in Reusner's *Emblemata*, Frankfurt, 1581, No. 1. Devices taken from the Emblem Books are found on many jettons of the 16th and 17th centuries; see *e.g.*, No. 93. (*Cp.* Bie, Pl. 65, xvii, and p. 196; Snel., Pl. IV, 18.) [Pl. I, 9.

- 16.—*Ob.* A shield of France-modern, ensigned with an arched crown between a laurel and a palm branch, and surrounded by the Collar of St. Michael. Legend: CAMERAE COMPUTOR[VM] REGIORVM. Rev. Peace and Justice

standing and crossing a palm (olive?) branch and a sword through a laurel wreath; between them is a tripod. Legend: SVB DV CENDIS RATIONIBVS. In Ex. 1570. Size 7½. Jetton of the *Chambre des Comptes* of Charles IX of France. The Rev. legend (wrongly translated in *Medallic Illustrations of British History*, I, p. 163, No. 147) means 'For casting accounts,' and is commonly found on counters of this department, and occasionally on those of the *Chambre des Monnaies*, in the second half of the 16th century. (Feu., No. 1744.) [Pl. I, 7.]

- 17.—Ob. A king (as is shown by the arched crown above his head) in a lion's skin, removing the Pillars of Hercules; on the right are the Tables of the Law and a pen, on the left a bow and quiver. Legend: HERCVLE MAIOR ERIT. In Ex. 1588. Rev. A shield of France-modern ensigned with an arched crown; beneath are two interlaced c's; all between a pair of columns, flanked on the right by a bow, quiver, etc., emblems of Hercules, on the left by the Tables of the Law and a branch of laurel. Above the whole is a canopy. Legend: PIETATE ET IVSTITIA. In Ex. HANS S. Size 8. This is a type of Charles IX of France (see on No. 14), but dated within the reign of his brother and successor Henry III (1574-89,) and struck at Nuremberg by Hans Schultes for general use, though primarily perhaps for France. The Rev. type is copied from a jetton of Charles IX of 1561 or 1562. (Cp. Bie, Pl. 63, iii, and p. 189; Snel., Pl. IV, 7, Rev.)

- 18.—Ob. A shield of France-modern, ensigned with an arched crown, and surrounded by the Collar of St. Michael. Legend: NIL NISI CONSILIO. Rev. Three arched crowns arranged in triangle, the uppermost surrounded by clouds. Legend: MANET VLTIMA [CORONA] CELO. Size 8. Gilt. Jetton of the type of the *Conseil du Roi*, temp. Henry III of France (1574-89). The Ob. legend, which is regularly found on counters of this department is perhaps based on *Vulgate*, Prov. xv, 22: *Dissipantur cogitationes ubi non est consilium: ubi vero sunt plures consilarii, confirmantur*. On the Rev. the two lower crowns are those

of France and Poland, the third, or Heavenly, crown awaits the King above. *Cp.* the familiar passage in Lydgate (*temp.* Henry VI of England), and his 'application' of the three crowns on the banner of St. Edmund to Henry VI, assigning two to France and England and the third to the future celestial crown:—
 'These thre crownys historyaly t'aplye, | By pronostyk notably sovereyne | To sixte Herry in fygur signefye | How he is born to worthy crownys tweyne, | Off France and England, lyneally t'attheyne | In this lyff heer, afterward in hevene | The thrydde crowne to receyve in certeyne | For his merits above the sterrys sevene.' (*Cp.* Rev. of No. 21.) This piece was perhaps minted at Nuremberg: if so, it is a copy of the corresponding French piece. The design first appears in France on a Medalet-Jetton struck in, or about, 1575 by the Estates of Burgundy, in commemoration of the progress made through their province that year by Henry III. (Blanchet, *ibid.*, p. 12; Font., 268-9; Feu., No. 9771.) It was adopted on a royal jetton of 1577 (Bie, Pl. 75, xix, and p. 221), and is often found during his reign. [Pl. I, 8.

- 19.—*Ob.* The type is that of No. 18, the legend as that of No. 16. *Rev.* Fame, standing, and blowing her trumpet. Legend: SVB DVCENDIS RATIONIBVS. (See on No. 14.) In Ex. 1576. Size 8. Jetton of the *Chambre des Comptes* of Henry III of France (Feu., No. 1755.)
- 20.—*Ob.* As that of No. 19. *Rev.* An allegorical female, standing, holds in her right hand the decalogue, in her left a globe. Legend: as on Rev. of No. 19. In Ex. 1577. Size 8. Jetton of the same department and reign as the preceding piece. (Feu., No. 1756.)
- 21.—*Ob.* A soldier in Roman armour, standing, to left; on his head a helmet, in his right hand a cresset (?), in his left a spear. At his feet the sword and helmet of (?) a defeated enemy. Legend: AVT CAESAR AVT NIHIL, the famous motto of Caesar Borgia. In Ex. H.K. *Rev.* (A variant of that of No. 18, *q.v.*) Three crowns arranged in

triangle, the two lower ones open, the upper one arched and among stars. In the centre a palm and a laurel branch tied together; six lys are disposed about the field and fill up the vacant spaces. Legend: as on Rev. of No. 18, but COELO. Size $7\frac{1}{2}$. Struck at Nuremberg by Hans Krauwinkel. This Rev. is copied from a French jetton of 1584 or 1585, given in Bie, Pl. 78, xxxvii, and p. 231. (*Cp. Snel., Pl. IV, 17, Rev.*)

22.—*Ob.* A pair of clasped hands, holding two cornucopiae, between which is a caduceus. Legend: PAX ET FOEL [ICITAS] TEMP[ORVM]. In Ex. MDLXXXIX in two lines. *Rev.* Venus, Minerva, and Juno, standing, with their respective attributes of Cupid and his bow, spear and Gorgon-shield, and peacock. Legend: PALLAS IVNO VENVS. Size 8. This is classed by Feuardent (No. 7490) as a jetton of Charles III, Duke of Lorraine from 1543 to 1608; but it was doubtless made by Hans Krauwinkel of Nuremberg, as the Rev. is from a die for his Classical Series (Nos. 83, etc., below). The same *Ob.* had appeared on a counter of 1560 of the French Mint (Feu., No. 2138; with which *cp.* Bie, Pl. 62, vi, and p. 186, of the same year; also his Pl. 66, xxiii, and p. 199 of the year 1568, and Pl. 100, cv, of 1608. In 1660 it occurs again on the Rev. of a jetton of Poitou: Feu., No. 9045.). The date on this piece would suit the alliance made in Ap., 1589, between Henry III of France and Henry of Navarre and the Huguenots against the Guises and the Catholic Confederacy, which it may commemorate, but Bie gives no French medal or jetton to suit that occasion. (Snel., Pl. IV, 12.) The type of the clasped hands with a caduceus between them was taken from the Roman coinage: *e.g.* the *Fides Publica* silver of Titus (Stevenson, *Dict. of Rom. Coins*, 1889, p. 149); as was the legend *Temporum Felicitas*. (*Ibid.*, pp. 113, 380, 782-3.)

23.—*Ob.* The shields of France and Navarre *accolés*, ensigned with an arched crown, and with an H for *Henricus*, through which laurel branches pass, below them. Round the shields are the collars of the Orders of St. Michael and the

Holy Ghost (?). Legend: the same as that on the Ob. of No. 16. *Rev.* A crowned globe (the earth) surrounded by three concentric circles composed successively of water, air (shown by clouds), and fire. Legend: NVNERO STANT OMNIA CERTO. In Ex. SVB DVCE[NDIS]RATIO[NIBVS]. 1600. in two lines. Size 8. Jetton of the *Chambre des Comptes* of Henry IV of France. When two chains surround the shields, that of St. Michael is always the inner one. (See on No. 13.) The *Rev.* type and its legend meant that the rule of Henry was as stable and regular as the processes of Nature. It will be noticed that a legend is often the fag-end of a Latin hexameter. Camden (*Remains*, 1674, 366-7) says: 'A motto is most commended when it is an Hemistich, or parcel of a verse.' (Feu., No. 1784; Font., p. 127; Bie, Pl. 91, LI, and p. 273.) [Pl. I, 10.]

24.—*Ob.* The French King, bare-headed (as Caesar), in armour, and with the commander's scarf and baton of his time, riding to the left (*cp.* No. 41). Legend: HENRI[CVS] IIII D.G. FRANCOR[VM] ET NAVAR[AE] REX. In Ex. H.K. divided by a cinquefoil. *Rev.* On an altar two columns supporting an arched crown (*cp.* No. 14). Round the right hand column is entwined a laurel, round the other a palm branch, which are tied together with a bow. Legend: FÆDERA MAGNI REGIS SACRA. Size 7½. Medalet-Jetton issued by Hans Krauwinkel of Nuremberg in imitation of the French medal of 1602, struck on the occasion of the renewal of the alliance with the Swiss. Feuardent (No. 1155*b*) places this among the counters of the French Government Department of the *Suisses et Grisons*. (*Cp.* Bie, Pl. 94, LXIX, and p. 283; Font., p. 155; Snel., Pl. V, 3, *Rev.*)

25.—*Ob.* The King of France, in armour and sword in hand, riding triumphant to the right over a battlefield strewn with weapons, etc. As on No. 24, he wears a commander's scarf. Legend: HENRICVS IIII GALLIA [*sic*] ET NAVARA [*sic*] REX. *Rev.* The shields of France-modern and Navarre flanking a drawn sword, hilt downwards, between laurel branches. The blade passes through an

open crown and the point penetrates a heavenly chaplet set among clouds, from which proceed rays and branches of laurel and palm. Legend: OMNIS VICTORIA A DOMINO. Size 7. Medalet-Jetton struck at Nuremberg in commemoration of Henry's victory at Arques in 1589; the Rev. follows that of the French medal. (Bie, Pl. 83, i, and p. 247.) The Rev. legend was probably suggested by *Vulgate*, I *Paralip.*, xxix, 11.

26.—*Ob.* A three-masted ship at sea, sailing to the left. Legend: FLUCTVAT NEC MERGITVR. *Rev.* Representation of the town of Nuremberg, with Mercury flying in the sky, symbolizing its commercial importance. Legend: NVRNBERG. In Ex. two palm and two laurel branches crossing, flanked by H.K. Size 7. Jetton issued by Hans Krauwinckel of Nuremberg, *temp.* Henry IV of France; perhaps primarily for use in Paris, as the ship and its legend suggest, for the former is taken from the arms of that city, a ship under sail, with a chief semé of fleurs-de-lys. The ship was typical of commerce, the lys of the loyalty of the capital to the crown. On some early 15th century jettons of Paris, however, the ship is identified with the Church, as is shown by the following distich which occurs on them:—*Svr toutes cites Paris prise: Car sa nef figure leglise.* The motto *Fluctuat at nunquam mergitur*, or *Fluctuat nec mergitur*, appears on Paris jettons first in 1581 and 1585 respectively. (See, e.g., Affry, *Les Jetons de l'Echevinage Parisien*, 1878, pp. 3-7, 18, 21.) The Rev. of this piece is virtually an advertisement of the maker's name and address. (Snel., Pl. IV, 2, 6.) [Pl. I, 11.]

27.—*Ob.* Similar to that of No. 25, but the king is bare-headed (as Caesar: *cp.* Nos. 24, 41, 98.) Legend: HENRIC [VS] IIII LA [*sic*] ROI OE [=DE] FRAN[CE]. In Ex. H.K. divided by a quatrefoil. *Rev.* The type bears a general resemblance to the Rev. of No. 25: the shields of France-modern and Navarre separated by branches of laurel. Above them is a dolphin, on whose head an arm, descending from heaven, places a crown. Legend: A FRANSVA . A

DAFIN . A NAVARA. 1604. Size 8. *Jeton Banal* issued by Hans Krauwinckel of Nuremberg, perhaps in the first instance for use in Dauphiné. The Dauphin named in the Rev. legend is Louis (Dauphin from 1601 to 1610), afterwards King as Louis XIII. (Font., p. 45; Feu., Plate II, 28, Ob.)

28.—Ob. Shield of arms of France-modern, ensigned with an arched crown, and surrounded by a collar. Legend: HENRI[CVS] IIII ROY DE FRAN[CE] ET NAVARES. Rev. Two nude children, seated on a hillock, embrace with one arm and hold each a lys in the disengaged hand; rays from Heaven descend upon them. Legend: HOC FOEDERE LILIA FLORENT. Size $4\frac{1}{2}$. Medalet-Jetton commemorating the marriage of Henry IV of France with Mary dei Medici in 1601: perhaps distributed to the populace upon the occasion. The Rev. legend, of course, refers to this alliance. (Cp. Bie, Pl. 92, LVII, and p. 277.)

29.—Ob. As that of No. 23. Rev. Apollo and Diana, as children, stand, holding hands, on the island of Delos. A fleet surrounds them as protection. Legend: STAT PROLE HAC ALTERA DELOS. In Ex. SVBVCENDIS RATIONIBVS. 1603. Size $7\frac{1}{2}$. Jetton of the *Chambre des Comptes* of Henry IV of France. This piece commemorates the birth of two of Henry's children, Louis, afterwards Louis XIII, and Elizabeth, afterwards Queen of Philip IV of Spain. In the Rev. legend *stat* refers to the island being chained by Jupiter to the bottom of the sea in order to provide a safe resting place for Latona during the birth of her children Apollo and Diana. (Feu., No. 1788; Rouyer, *Revue Numis. Belge*, 1884, Pl. I.)

30.—Ob. The princess Henrietta Maria, standing, facing to the front; in her right hand is a branch of myrtle (?), her left rests on a table, on which is a vase of lilies, representing her native land. Legend: HENR[ICI] GALL[IAE] REG[IS] FILIA. Rev. Probably the apple of Venus. Legend: CEDENT TRES VNI. H. KRAUWINGEL. Size 8. This Medalet-Jetton from Nuremberg celebrates the marriage of Henrietta Maria, daughter of Henry IV of France, to Charles I of

1
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JETTONS OR CASTING-COUNTERS.

2
32



JETTONS OR CASTING-COUNTERS.

England on 13 June, 1625. The myrtle on the Ob. would be appropriate as the *myrtus conjugala* of Cato, sacred to Venus. (Pliny, *Hist. Nat.*, XV, 36, 37.) The Rev. legend, taken as meaning 'Three will accrue to one,' may signify that three kingdoms, England, Scotland, and Ireland, will fall to Henrietta. (Feu., No. 12,033, and Pl. VI, 125A; Snel., Pl. V, 10.)

31.—Ob. Bust of Louis XIII of France to left, laureated and wearing a ruff. Legend: GRATVM QUO SOSPITE COELVM. Rev. Similar in type to the Ob. of Nos. 23 and 29, but below the shields is L, for LVDOVICVS. Legend: LVDOVICVS XIII FRANCORVM ET NAVARAE REX. Size 8. This Medalet-Jetton must have been issued early in the reign, as the young head and the ruff show: probably in 1615 (see Feu., Plate III, 62.) It is a good example of the great superiority of French over German work. In the Ob. legend *gratum* must be taken as 'thankworthy'; which suggests that thanks were due to Heaven for having preserved the king till the attainment of his majority, which was on 27 Sept., 1614, when he reached his fourteenth year. The French kings then came of age. Medallie jettons are often a year late: see on No. 37.

32.—Ob. Young bust of Louis XIII of France, to right, crowned and wearing a ruff. Legend: LVDO[VICVS] XIII D. G. FRANC[ORVM] ET NA[VARAE] REX CHRISTIANA [blundered for CHRISTIANI[SSIMVS]]. Rev. The city of Reims; a hand from Heaven supplies the *ampulla* containing the oil of consecration. Legend: FRANC[IS] DATA MVNERA COELI XVII [OCTOBRIS 1610]. In Ex. RHEMIS. W. L. 1615. in two lines. Size 8. A reminiscent Medalet-Jetton commemorating the coronation of this king at Reims 17 Oct., 1610, issued presumably by Wolf Lauffer of Nuremberg (*cp.* No. 36), though from the red colour of the metal it resembles a Low Country counter. (Feu., No. 7884a; *cp.* Bie, Pl. 110, i, and p. 327. For a similar type in the next reign see Menestrier, *Histoire du Roy Lovis le Grand par les Médailles, Jetons, &c.*, 1693, p. 5.)

33.—Ob. Similar in type to that of No. 23, including the collars,

but below the shields is a crowned monogram which is not clear; perhaps L and M for Louis XIII and his mother the queen-regent Mary, or H and L for Louis and his father Henry IV. Legend: LVDOVICVS XIII D.G. FRANCORVM ET NAV[ARAE] REX. *Rev.* A young tree growing round and clothing with foliage its dead parent stem so as to make it appear alive. Legend: VIVERE CREDIT AMOR. Size 8. Medalet-Jetton of Louis XIII; undated, but 1611. The *Rev.* type is emblematic of the youthful king's love for the memory of his father, and its legend, perhaps suggested by Verg., *Æn.*, I, 222, is to be explained as *Amor filii patrem vivere credit*. (Bie, Pl. 110, iv, and p. 328.)

34.—*Ob.* Similar in type to No. 33. Legend: LVD[OVICVS] XIII D. GR. FRANCORVM ET NAVAR[AE] REX. *Rev.* The eagle of Jupiter, representing France, darting thunderbolts, but holding in his beak an olive branch. Legend: PACEM DVELLO MISCVIT. In Ex. 1615. Size 8. The *Rev.* type and legend explain one another, and perhaps refer to the winning over of the Parliament of Paris by the Queen-Regent Mary dei Medici from the malcontent nobles which averted civil war.

35.—*Ob.* Similar in type and legend to No. 18 (*q.v.*), but the outer collar is added, as on No. 31. *Rev.* A hand from Heaven weighing two crowns, that of France accompanied by the sceptre and the Hand of Justice, the other by ears of corn. Legend: QVO LILIA VERGVNT. In Ex. 1633. Size 7½. Jetton of the *Conseil du Roi* of Louis XIII of France. The *Rev.* type and legend seem to signify that the royal government and national prosperity tend to an equipoise. (Fen., No. 143; Bie, Pl. 129, cxviii, and p. 397.)

36.—*Ob.* The busts of Louis XIII of France and his queen Anne of Austria, jugate, to right, both crowned and wearing ruffs; the king in armour. Legend: LVDO[VICVS] XIII D.G. FR[ANCORVM] ET NA[VARAE] ANNA AVSTR[IAE] HISPANI[AE]. *Rev.* A pair of hearts united by the words CARITAS, SPES, FIDES, in three fillets; above is an arched crown with

a palm and a laurel branch on either side; below are L for LVDOVICVS, and A for ANNA, divided by the Austrian eagle. On a ribbon beneath this is the inscription NVNQVAM MARCESCENT, under which is H.K. separated by a floral decoration. Size 8. Medalet-Jetton struck at Nuremberg by Hans Krauwinckel, commemorating the marriage of Louis with Anne in 1615. *Nunquam marcescent* is probably adapted from *Vulgate, Jac.*, I, 11: *dives marcescet*. (Font., p. 49; Snel., Pl. V, 8.)

37.—*Ob.* Similar to that of No. 36. The legend reads HISPAN. *Rev.* As that of No. 36, but the date, 1616, and the initials of the maker, W.L., are divided by the hearts, and there is of course no H.K. at the bottom. Size 8½. Medalet-Jetton, as the last, but struck by Wolf Lauffer of Nuremberg, and of ruder work. In the redness of the metal this piece resembles No. 32 by the same manufacturer. Medalet-Jettons often bear the date of their year of issue, not that of the event they record; thus, like this one, they are frequently a year late, sometimes more: *cp.* Nos. 31, 32, 38.

38.—*Ob.* Similar in type to the *Rev.* of No. 34, but the shields are somewhat smaller, and there are differences in the outer collar. Legend: LVDOVICVS XIII D.G. FRANCORVM ET NAV[ARAE] REX. *Rev.* The right arm of the Virgin issuing from Heaven, on the right, holds the crown of France, the reflection of which in the sea two dogs are trying to seize. In the left distance is the town of Rochelle. Legend: AVIDI FALLVNTVR IN VMBRA. In Ex. 1629. Size 7½. Medalet-Jetton commemorating the defeat of Buckingham at Rochelle in 1627, but dated two years later. The dogs on the *Rev.* represent England and the Huguenots. The type and the legend explain each other, and doubtless were suggested by Phaedrus, *Fab.*, I, iv, *Canis Deceptus*. (*Cp.* Feu., 9097—9101). [Pl. I, 12.

39.—*Ob.* Bust of Louis XIII to left, laureated and wearing a toga. Legend: LVD[OVICVS] XIII D.G. FRANC[ORVM] ET NAVA[RAE] REX. *Rev.* A cornucopiae showers from Heaven fruits, corn, etc., upon persons of both sexes, who

collect them in baskets and bags. Legend: DIVITIAS DII DANT ET JVRA FRVENDI. In Ex. 1639. Size $7\frac{1}{2}$. The Rev. legend seems to be adapted from Horace, *Epist.*, I, iv, 7: *Di tibi divitias dederant artemque fruendi*. This was a year of success for French policy, which may be here recorded. [Pl. I, 13.]

40.—*Ob.* Similar in type to that of No. 39. Legend: LVDOVIC [VS] XIII D.G. F[RANCORVM] ET NA[VARAE] REX. *Rev.* A dolphin coiled round an anchor. Legend: AD SPEM SPES ADDITA GALLIS. In Ex. 1643. Size $6\frac{1}{2}$. Medalet-Jetton of Dauphiné commemorating the birth of Philip, Duke of Orleans, second son of Louis XIII, apparently published at the time of the accession of his elder brother Louis XIV, who, of course, is referred to in the *spem* of the Rev. legend. (Feu., No. 11151a) The *Delphinus anchorae implicitus* is probably taken from the Rev. of a First Brass of Domitian, or of a Denarius of Titus. (Stevenson, pp. 44, 339.)

41.—*Ob.* Louis XIII on a prancing horse, to left, bare-headed (as Caesar; *cp.* Nos. 23, 27, 98), in armour, wearing a ruff and a captain's scarf, and holding in his left hand the baton of a commander, as on No. 24. Legend: LVDOVICVS XIII D.G. FRAN[CORVM] ET NA[VARAE] REX. *Rev.* Similar to that of No. 25. Legend: WOLF LAVFER RECHEN PFENING M[ACHER]. Size 8. A Nuremberg *jeton banal*, which, judging from the king's wearing a ruff, not a collar, was probably issued early in the reign. (Snel., Pl. V, 6.) For the scarf and baton of a military leader in the 17th century see the Title Page of Robert Ward's *Animadversions of Warre*, 1639.

42.—*Ob.* Bust of Anne of Austria to right. Legend: ANNA D. GRATIA FR[ANCORVM], continued on the Rev., ET NAV[ARAE] REG[INA] REGNI MODERATRIX. *Rev.* Shield of arms of France-modern impaling the partly dimidiated arms of Anne, ensigned with an arched crown and surrounded by an interlaced cordon. Size $7\frac{1}{2}$. Medalet-Jetton commemorating the Regency of the widow of Louis XIII during the minority (1643-61) of her son

Louis XIV. The arms of the queen-mother as displayed here are curious:—*Per fess* (A) *quarterly, Castile and Leon*; (B) *Austria-ancient* [gules, a fess argent; but wrongly shown: on some pieces of this series it is correctly given]; *over all are two escutcheons, dimidiated and attached to the palar line: that in chief the sinister half of the arms of Portugal, that in base the sinister half of those of Flanders.*

- 43.—*Ob.* Youthful bust of Louis XIV to right, laureated and in toga. Legend: LOVIS XIII ROY D[E] FR[ANCE] ET DE NAVARE. *Rev.* Three hearts ensigned with an arched crown. Legend: LES CŒVRS FIDELES. Size 6½. Medalet-Jetton published in 1643 to commemorate the alliance of France, Portugal, and the Low Countries made on the 1st June in the preceding year. (Font., p. 157; *cp.* Feu., No. 161.) The *Rev.* type, with a different legend, had appeared in 1615 on a jetton of Louis XIII, symbolizing the union of the Three Estates under the Crown. (Bie, Pl. 114, xxix, and p. 342.)
- 44.—*Ob.* Nearly full-faced youthful bust of Louis XIV, in long hair; crowned, and wearing a lace-edged collar or 'falling-band.' Legend: LVDOVIC[VS] XIII D.G. FR[ANCORVM] ET NAVAR[AE] REX. *Rev.* In general similar to that of No. 34, but the shields have angular bases, and the details of the collars are fanciful owing to the ignorance of the designer or the die-cutter. Legend: CONRAD LAVFER RECH[EN] PFENIG MACH[ER] I[N] NV[ERNBERG]. Size 7. A stock counter for general use, issued very early in the reign of Louis XIV, as the portrait shows. I have been unable to find any French model for this bust. [Pl. I, 14.]
- 45.—*Ob.* Young bust of Louis XIV to right, bare-headed, with long hair; in armour, scarf, and falling lace-collar. Legend: LVD[OVICVS] XIII D.G. FR[ANCORVM] ET NAV[ARAE] REX. *Rev.* Practically the same as that of No. 35, with slight differences of detail. These two collars are well shown in Menestrier, p. 5, fig. 3. Legend: NIL NISI CONSILIO. (See on No. 18.) Size 7. Jetton of the *Conseil du Roi*. Undated, but 1651. (*Cp.* Feu., No. 199.)

- 46.—*Ob.* Young bust of Maria Theresa to right. Legend: MAR[IA] THER[ESA] D.G. FR[ANCORVM] ET NAV[ARAE] REG[INA]. *Rev.* The queen in a canopied chariot, attended by halbardiers, etc., is about to pass under a triumphal arch. Legend: AVGVSTAE PACIFERAE LVTETIAM FELIX INGRESSVS. In Ex. 26 AVG. 1660. Size 8. Medalet-Jetton commemorating the state entry into Paris, on the date given, of Louis XIV and his bride Maria Theresa, after their marriage on the 9 June preceding. The *felix ingressus* of the *Rev.* legend occurs on the *Rev.* of a gold coin of Maximianus Herculeus. (Stevenson, p. 383.) There are numerous variants of this jetton. (See Feu., pp. 271-2, and Pl. xiii, 258; Menestrier, p. 36, fig. 31; *Médailles de Louis le Grand*, 1723, p. 59; Van Loon, *Histoire Métallique des Pays Bas*, 1732, III, 451; Dugniolle, *Le Jeton Historique des Pays Bas*, 1876-80, No. 4155; De la Hode, *Histoire de Louis le Grand*, 1740-2, II, 524, and Pl. V, 28; Bazin, *Hist. de France sous Louis XIII et Mazarin*, 1846, pp. 449, 453.) [Pl. I, 15.]
- 47.—*Ob.* Head of Louis XIV, to right, in periwig. Legend: LVDVICVS MAGNVS REX. *Rev.* The eagle of Jupiter with thunderbolts in his left claw flying above a plain; a town (Dunkirk?) in the distance. Legend: SINE CRIMINE GESSI. Size 7. The *Rev.* is of the type of Feuardent's No. 655, a jetton of the *Extraordinaire des Guerres* of France for 1662. Contemporary, but possibly made in Germany.
- 48.—*Ob.* Bust of Louis XIV, to right, in periwig and Roman costume. Legend: LVD[OVICVS] XIII D.G. FR[ANCORVM] ET NAV[ARAE] REX. *Rev.* The sun shining on land from which young laurels are springing up. Legend: IVBET REVIRESCERE LAVROS. In Ex. ORDINAIRE DES GVERRES. 1664. Size 8. This is a modern re-strike (1860-70) from the original dies at the French Mint of the jetton of the department specified for the year named. The *Rev.* type possibly refers to the purchase of Dunkirk from Charles II of England in Nov., 1662. The sun represents Louis, having been chosen as his device by the Academy of Inscriptions constituted by him in the preceding year.

(Feu., No. 429; Menestrier, p. 47, No. 4.) Some of these restrikes have R.F. for *refrappe*, below the bust: others have a plain edge with *argent* or *cuivre* incuse upon it.

- 49.—*Ob.* Bust of Louis XIV, to right, in periwig and toga. Legend: LVD[OVICVS] XIII D.G. FR[ANCORVM] ET NAV[ARAE] REX. *Rev.* A hedgehog walking to the right. Legend: MAGNI AGMINIS INSTAR. In Ex. EXTRAORDINAIRE DES GVERRES. 1667. Size 7½. The hedgehog occurs, as an appropriate symbol, on several of the counters of the French War Office; and the *Rev.* legend, which is from Verg., *Æn.*, VII, 707, is suited to its device. (Feu., No. 663.)
- 50.—*Ob.* Bust of Louis XIV, to right, in periwig and armour. Legend: LVD[OVICVS] XIII D.G. FR[ANCORVM] ET NAV[ARAE] REX. *Rev.* A swarm of bees; their queen surrounded by a glory. Above them are clouds, below is the earth. Legend: INSTANT OPERI BELLISQVE. In Ex. 1670. Size 6½. Jetton of the same department as Nos. 47 and 49. The *Rev.* legend was presumably suggested by Verg., *Æn.*, I, 508. (Feu., No. 669.)
- 51.—*Ob.* Older head of Louis XIV, to right, in periwig and laureated. Legend: LVDOVICVS MAGNVS REX. Under the truncation N. *Rev.* A conduit of Renaissance architecture with its fountain, explaining the legend: HINC DECVS VNDE EFFVNDIT. In Ex. CHAMBRE AVX DENIERS DV ROY. 1695. Size 7. Jetton of the department indicated. The N. on the *Ob.* may be the signature of Jacques Nillis, who engraved medals and jettons at Paris from 1685 to 1695, and so signed himself sometimes: see Rondot, *Médailleurs en France*, 1904, p. 325. (Feu., No. 2411.)
- 52.—*Ob.* Muled Jetton composed of two Reverses: (1) Neptune standing, and brandishing his trident, in a shell-car drawn by a pair of sea-horses, to the left, over a calm sea. Legend: AEQUORA LUSTRANDO PACAT. In Ex. two palm branches crossed. (2) Aurora, holding a light in her uplifted left hand, drives a two-wheeled chariot and pair of horses, to the right, over clouds; below is the earth. Legend: LATE CVNCTA PROFVNDIT. In Ex. two palm

branches crossed. Size 7. The Neptune Rev. is that of the jetton of 1700 for the *Galères* of France, a department of the Marine. (Feu., No. 1441.) The legend was doubtless suggested by Verg., *Æn.*, I, 128-160. The Aurora Rev. is, in type, the same as that of the jetton of Marie-Adélaïde of Savoy, Duchess of Burgundy and mother of Louis XIV, for 1704 (Feu., No. 9744), but the legends differ. Here, if Aurora typifies the bounty of the Duchess, the legend is possibly founded upon Cicero, *De Off.*, I, 24, §84, ll. 1, 2. [Pl. I, 16.]

53.—*Ob.* Head of Louis XIV, to right, in periwig. Legend: LUDOVICUS MAGNUS REX. Under the truncation T.B. in monogram. *Rev.* The dragon Ladon guarding the golden apples of the Hesperides. Legend: SERVAT TERRETQUE VICISSIM. In EX. GALERES. 1709. Size 8. Jetton of the *Galères* of France. T.B. is the signature of Thomas Bernard (the second), 1675-1713, graver in ordinary to the king, and maker of a large number of medals and jettons: see Rondot, pp. 318-9. (Feu., No. 1463.)

54.—*Ob.* Bust of Louis XIV, to right, in periwig and toga. Legend: LVD[OVICVS] XIII D.G. FR[ANCORVM] ET NAV[ARRAE] REX. *Rev.* A phoenix burning on a pyre kindled by the sun. Legend: VT SIT POST FATA SVPERSTES. In EX. REVENVS CASVELS. 1667. Size 6½. Jetton of the department named in the exergue. On the Rev. the sun is, of course, Louis (see on No. 48); and the explanation is found in the legend of another jetton of the same type:—*Sin par el que arde, sin par lo que quema*, which originally referred to the king's marriage. The Rev. legend is evidently drawn from Verg., *Æn.*, XI, 160: *Vici mea fata, superstes*. (Feu., No. 2638; Menestrier, p. 46, Nos. 58, 65.)

55.—*Ob.* Bust of Louis XIV, to right, in toga and laureated periwig. Legend: LOVIS LE GRAND ROY DE FRANCE. Under the truncation L. G. L. *Rev.* An altar bearing an offering of ears of corn; about it are sheaves, behind it is a cornfield. Legend: PARVO PRO MVNERE QVANTA. In EX. PARTIES CASVELLES. Size 6. The signature L. G. L. is

that of Lazarus Gothlieb Lauffer of Nuremberg, and the piece is a copy, on a reduced scale, of the French official jetton of the department indicated for the year 1697. L. G. Lauffer's imitations differ from the French originals in bearing no dates, in being smaller, and in representing the king as of mature age whatever might be the period of his reign to which the Rev. belonged. The introduction of these counterfeits into France was in 1672 made illegal (Abot de Bazinghen, *Traité des Monnoies*, 1764, I, 82), and all French pieces were ordered to be struck at the Louvre mint. This prohibition, however, was ineffective, and Nuremberg continued to flood France with *jetons banaux* which undersold the superior productions of Paris. In the Rev. legend *quanta* is the cornfield in the rear, which represents the great result of the little offering; and probably is meant to suggest how much the country gets back from the king in return for the small income of this department. (Feu., No. 2693.) [Pl. I, 17.

- 56.—*Ob.* Head of Louis XIV, to right, in laureated periwig. Legend: LVDOVICVS MAGNVS REX. Signature under truncation L. G. L. *Rev.* France personified as a female, standing, facing to the right, and armed with helmet, spear, sword, and shield; at her feet are architectural implements. Legend: ARMIS NUNC TOTA. In Ex. scroll-work, instead of a date. Size $6\frac{1}{2}$. For the signature see No. 55. Reduced copy (see under No. 55), made at Nuremberg, of the jetton of the French department of the *Bastiments du Roy*, or *Aedificia Regia*, for 1696. The Rev. type apparently alludes to the exhausted state of France at the opening of that year: no resources were left for the royal buildings, every penny being needed for military purposes. (*Cp.* Feu., No. 3055.) [Pl. I, 18.
- 57.—*Ob.* Similar in type and legend to that of No. 56, but the king is not laureated, and with the same signature. *Rev.* The emblems of Hercules, his bow, club, and lion's pelt, laid aside in token of peace, rest against an unfinished building; a park, with an avenue, is on the right.

Legend: ET SVNT OTIA DIVIS. In Ex. EDIFICIA[sic] REGIA, above scroll-work in place of a date. Size $6\frac{1}{2}$. For the signature see No. 55. Reduced copy (see under No. 55), made at Nuremberg, of the jetton of the *Bastiments du Roy* of France for 1697. The Rev. type and legend commemorate the Peace of Ryswick, 30 Oct. in that year. The incomplete masonry denotes the suspension of building operations referred to in connection with No. 56; while the Rev. type and legend of the next jetton issued for this department bears out the explanation given of these last two pieces:—Minerva laying down her arms, with the legend *Veteres revocabit artes*. [Pl. I, 19.]

58.—Ob. Bust of Maria Theresa, queen of Louis XIV, to right; older than that on No. 46. Legend: MAR[IA] THER[ESA] D.G. FR[ANCORVM] ET NAV[ARAE] REG[INA]. Rev. The Argo sailing back, to right, with the Golden Fleece hanging from its mast. Legend: MEVS ET MIHI VICIT IASON. In Ex. 1668. Size 7. Medalet-Jetton possibly commemorating the Treaty of Aix-la-Chapelle between France and Spain, 2 May, 1668. The portrait of Maria Theresa would be appropriate, as she was the daughter of Philip IV of Spain; and the Rev. type with its legend would be easily intelligible: Louis being Jason, his queen Medea, her father Aeëtes, and the French conquests in the Spanish Netherlands the Golden Fleece, which, too, would have a further symbolical reference to the Order of Flanders. Van Loon, however, (III, 14, 15) allots this piece to the first conquest of Franche-Comté: see under No. 60. [Pl. I, 20.]

59.—Ob. Young bust (cp. No. 46) of Maria Theresa, to right. Legend: MAR[IA] THER[ESA] D.G. FR[ANCORVM] ET NAV[ARAE] REG[INA]. Rev. A burning-glass standing on a plain with the sun shining through it. Legend: HINC SPLENDOR ET ARDOR. In Ex. 1669. Size 7. Medalet-Jetton originally struck to commemorate the marriage of Louis XIV and Maria Theresa (Menestrier, p. 46, fig. 57); but as this is dated nine years later, it evidently continued to be issued long after the event. Possibly it was a

popular piece that sold well. On the *Rev.* the sun is the king, as usual, the burning-glass the queen. The type and legend explain one another. The same device had occurred earlier on two jettons of Fabert, sheriff of Metz in 1611 and 1624 (Robert, *Jetons de Metz*, 1853, pp. 35-6, Pl. II, 1, 3; and on a jetton of the queen-mother Mary dei Medici, of 1620, where she is the glass, her son Louis XIII the sun. (Bie, Pl. 107, xxxi, and p. 321); and appeared later on one of 1701, of Marie-Adelaide of Savoy, wife of Louis, Duke of Burgundy (grandson of Louis XIV), and mother of Louis XV. (Feu., Nos. 9731-9736a; Font., p. 60.) [Pl. II, 1.

60.—*Ob.* As that of No. 49. *Rev.* Louis XIV, in Roman costume, holding up in his right hand a palm branch, in his left a figure of Victory, stands between France, resting after battle, and Burgundy, kneeling and presenting him with a palm. Legend: LVDOVICO XIV OB SERVATAM VICTIS SEQVANIS PROVINCIAM. Size 7. Medalet-Jetton commemorating the first conquest of Franche-Compté by Louis in 1668. (Feuardent, No. 9803; Van Loon, III, 137; Menestrier, p. 37, fig. 49.) [Pl. II, 2.

61.—*Ob.* As that of No. 56. *Rev.* Victory flying to the right, holding in her right hand a laurel wreath, in her left a standard of the arms of France; below are a cannon, powder-barrels, shot, and flags. Legend: PVGNA AD SENEFAM. Size 6½. Counter struck by Lazarus Gothlieb Lauffer of Nuremberg in imitation of the Medalet-Jetton commemorating the battle of Senef, at which William of Orange was defeated by Condé, 11 Aug., 1674. The *Rev.* type advertizes the capture of colours and munitions of war made by the French. (*Cp.* Van Loon, III, 144; Dugniolle, No. 4326; *Médailles de Louis le Grand*, 1723, I, 137; De la Hode, III, 506, and Pl. XIV, No. lxxix.) [Pl. II, 3.

62.—*Ob.* Similar to that of No. 51 (*q.v.*), but not laureated. *Rev.* Victory, standing on the hull of a classical warship, brandishes in her right hand a thunderbolt and holds in her left a palm branch. Legend: INCENSA BATAVORVM

CLASSE. Size $6\frac{1}{2}$. Medalet-Jetton commemorating the burning of the Dutch fleet at Tabago on 3rd March, 1677. The Rev. type bears a strong resemblance to that recording the naval victory of Demetrius Poliorcetes over Ptolemy, given in Montfaucon, I, Pl. 16, iv. (Dugniolle, No. 4374; Van Loon, III, 208; Menestrier, p. 20; De la Hode, IV, 109, and Pl. IV, No. xxiii; *Médailles de Louis le Grand*, 158.)

63.—*Ob.* Two marshal's batons, ornamented with lys, in saltire, passing through a cypher composed of two italic L's; the whole ensigned with an arched crown. Legend: CONNETABLIE MARECHAUSSEE DE FRANCE. *Rev.* An arm in plate issuing from a cloud on the right and holding a sword, to the blade of which is tied a wreath of olive and oak. Legend: NON SINE NUMINE. Size 8. A modern (1860-70) re-strike (like No. 48) from the original dies at the French Mint of a jetton of the department of the Constable and Marshal of France, *temp.* Louis XIV. (Feu., No. 1660; Font., p. 168.)

64.—*Ob.* Bust of the Dauphiness Anna Maria to right. Legend: ANNA MARIA CHRIST[INA] DELPHINA. *Rev.* A crown in the sky among clouds and stars; below is the earth. Legend: NOVVM DECVS ADDITA COELO. In Ex. MDCLXXXI. Size 7. Medalet-Jetton commemorating the marriage of this Bavarian Princess with Louis XIV's son, Louis the Dauphin, who died in 1711, *vita patris*. The bride is added as a new star to the heaven presided over by the sun, Louis XIV. (Feu., No. 11178.)

65.—*Ob.* Shield of the arms of Burgundy (1 and 4, France-ancient within a bordure compony argent and gules; 2 and 3, Burgundy ancient, bendy of six [wrongly shown] or and azure within a bordure gules), ensigned with a prince's crown of France; behind the shield is a stiff mantle of the same arms, the lining semy of lys. Legend: ESTATS DE BOVRGOGNE. *Rev.* Louis XIV, as Hercules, with lion's skin and club, standing on a battle-field strewn with corpses, cannon, etc. Legend: IL ASSEVRE MON REPOS. In Ex. MDCLXXXVIII. Size 9. Medalet-Jetton of the

Estates of Burgundy :—‘ En 1688,’ says Fontenay, p. 297, ‘ la Bourgogne, qui commençait à respirer, représenta le roi sous les traits d’Hercule au repos.’ (Feu., No. 9821.)

- 66.—*Ob.* Three-quarter bust, to right, of the Dauphin Louis (b. 1661), son of Louis XIV, laureated and in lace-edged collar. Legend: *GALLICUS DELPHINUS*. *Rev.* A dolphin swimming to the left; above him the inscription *J’AIME ET SUIS AIMÉ*. Legend: *CONRAD LAUFFE[R] RECH[EN] PFEN[ING] MACH[ER] IN NURNB[ERG]*. Size 8. Gilt. German *jeton de pacotille* commemorating the prince named: c. 1674. The inscription on the *Rev.*, of course, suits the legendary character of the dolphin, the canting heraldic bearing of the Dauphins of France. (Feu., No. 11168.) For a similar piece by Wolf Lauffer see Loir, *Monnaies etc. de Mantes*, 1859, Pl. V, fig. 3; cp. Snel., Pl. V, 9.) [Pl. II, 4.]
- 67.—*Ob.* Bust of Louis XIV, to right, in periwig, armour, and steinkirk. Legend: *LOVIS XIV ROY DE FR. ET DE NAV.* *Rev.* A circular shield of France-modern, between crossed palm branches and ensigned with an arched crown. Legend: *IOHANN WEIDINGERS RECHEN PF[ENING]*. Size 9. *Jeton de pacotille* issued c. 1690 (?) by Johann Weidinger of Nuremberg. The *Rev.* follows a French coin type, one of those of the silver *écu* of the time.
- 68.—*Ob.* Bust of Louis of XIV, to right, in periwig and toga. Legend: *LVD. XIII D.G. FR. ET NAV. REX.* *Rev.* A ‘square’ shield of France-modern ensigned with an arched crown. Legend: *CORNELIVS LAVFFERS RECHEN PFEN[ING]*. Size 7. *Jeton de pacotille* of c. 1680 (?), issued by another member of the Lauffer family of Nuremberg. The *Rev.* imitates one of the other types of the French silver *écu*.
- 69.—*Ob.* Similar to that of No. 67. The *Rev.* follows the same type of the French silver *écu* as No. 68. Legend: *LAZA[RVS] GOTTL[IEB] LAVFFERS RECH[EN] PFENING*. Size 8½. Jetton, c. 1675 (?), of the same character as the last two.
- 70.—*Ob.* Head of Louis XIV, to right, in periwig. Legend: *LVD. XIII D.G. FR. E[T] NAV. REX.* *Rev.* A cross formed of four lys, ensigned with an arched crown. Legend:

LAZ[ARVS] GOTTIL[IEB] LAVFFERS RECH[EN] PFEN[ING].

Size 4. Jetton of the same class, maker, and date as No. 69. The Rev. type was suggested by that of the *lis d'or* of Louis XIV.

- 71.—*Ob.* Bust of Charles III of Spain, to right, in periwig, armour, bands, and collar of the Golden Fleece. Legend: CAROLVS III D.G. HISP[ANIARVM] ET INDIA[RVM] REX. *Rev.* View of the city and harbour of Barcelona. Legend: BARCELLONA GALL[IS] EREPTA. 1705. In Ex. FORTITER CONTRA EOSD[EM] DEFENSA. 1706. Size 6½. Medalet-Jetton commemorating the taking of Barcelona from the French in 1705, and its defence against them in the following year. The place of its manufacture is uncertain: probably this was either Nuremberg or Gotha. (Van Loon, V, 22, No. vi; Le Clerc, *Explication des Médailles des Provinces-Unies*, 1723, p. 176; Rapin, *Medals of Queen Anne*, III, 12; *M.I.B.H.*, II, 283, No. 89.)
- 72.—*Ob.* Young bust of Louis XV, to left, in laureated periwig, Roman armour, and scarf. Legend: LVD. XV D.G. FR. ET N. REX. *Rev.* The youthful king, as Apollo radiated, standing, bow in hand, after overcoming the Python, which lies dead at his feet. Legend: VIS ANIMI CUM CORPORE CRESCIT. Size 6½. Medalet-Jetton, probably struck at Nuremberg, following the type of the French medal of 1718. The Python presumably represents the Spanish Minister Alberoni. At the side of Apollo's head is a flaw. (See Fleurimont, *Médailles du Regne de Louis XV*, n.d., but soon after 1736, Pl. 10.)
- 73.—*Ob.* Head of Louis XV as a child, to right, with long hair and laureated. Legend: LVD. XV. D.G. FR. ET NAV. REX. *Rev.* France, trampling on the shield of arms of Fontarabia, offers an olive branch to Spain. Legend: PACIS FIRMANDAE EREPTUM PIGNUS. Size 7. Medalet-Jetton, probably of Nuremberg manufacture, following the type of the French medal of 1719 recording the capture of the town of Fontarabia, 16 June, in that year, in consequence of which peace was expected, as the Rev. legend tells us. The two figures are distinguished by their

shields: the arms on that of Fontarabia are only shown here conventionally. (Fleurimont, Pl. 13.)

74.—*Ob.* The arms (*azure, a fracted chevron between two mullets in chief and a cinquefoil in base argent*) of Étienne Baudinet, Mayor of Dijon, in an oval shield, set on a bracket ensigned with a French viscount's coronet and supported by unicorns. Legend: CUM VIRTUTE DIU STABIT HONOS. In Ex. 1727. *Rev.* The arms of the town of Dijon (*Per fess: in chief 1. Burgundy modern; 2. Burgundy-ancient; in base a field gules*) in a 'square' shield, between two branches of laurel, ensigned with an arched crown. Legend: VILLE DE DIJON. In Ex. M. BAUDINET VICOMTE MAIEUR. Size 9. For the arms see No. 65. (Feu., No. 10090.) [Pl. II, 5.]

75.—*Ob.* Young bust of Louis XV, to right, in toga and laureated periwig. Legend: LUD. XV D. G. FR. ET NA. REX. *Rev.* *Occasio* ('Opportunity'), or Fortune, wafted on her shell-boat over the sea, to the left, with a sail in her hands. In the distance are two ships, one afloat, the other sinking. Legend: DAS KLVCK KOMBT. V. OBEN. In the field to the left is RE[CHEN], to the right PF[ENING]. In Ex. I. C. H. Size 6. *Jeton de pacotille* made at Nuremberg by Johann Conrad Höger, in the early years of Louis XV. The *Rev.* type is common on counters. Good and evil fortune are symbolized by the two ships. A similar conceit appears on the title-page of Vossius' edition of *Justin* (Elzevir, Amsterdam, 1664), where on the right side of Fortune is a ship sailing and an evidently prosperous city, on the left a vessel in distress and a town in flames. This piece was probably intended for use in play as well as for keeping accounts, which no doubt was the case with many of these 18th century common counters. A jetton in my own collection, undated, but certainly not earlier than 1750, bears the legend *Nuernberger Spiel & Rechen-Pfennig*.

76.—*Ob.* Bust of Louis XV, to right, in toga and laureated periwig. Legend: LVD. XV. D.G. FR. ET. N. REX. *Rev.* The sun shining on three lillies growing from one root. Legend: ALBERICHT HÖGER RECH[E]N PFEN[ING]. Size $4\frac{1}{2}$.

Contemporary *jeton de pacotille* struck at Nuremberg by the maker named. The Rev. type is copied from a French jetton of 1682 commemorating the birth of Louis, Duke of Burgundy, son of Louis the Dauphin and grandson of Louis XIV, the three lillies representing these three princes. (*Cp. Snel., Pl. V, 16.*)

77.—*Ob.* Young bust of Louis XVI, to left, in tye-wig and military uniform with decorations. Legend: LVD. XVI D.G. FR. ET NAV. REX. On truncation of arm REICH. *Rev.* A fountain playing. Legend: OMNIBVS NON SIBI. In Ex. IETTON. Size 6. Contemporary *jeton de pacotille* struck at Nuremberg by Johann Christian Reich. The Rev. type and legend, appropriate to the head of a state, are copied from earlier pieces.

78.—*Ob.* Similar to that of No. 77, but much better work. Below the bust is R. *Rev.* An infant seated on a dolphin, which is swimming to the left in a calm sea; in his left hand the child holds a lily (?) In Ex. a double festoon. Legend: FELICITAS PUBLICA. Size 6. *Jeton de pacotille* by the maker of the preceding counter. The type and legend of the Rev. suggest that the birth of the Dauphin Louis Joseph in 1785 is commemorated. The Rev. legend is borrowed from the Roman coinage, on which it is common from Vespasian to Valerian I, *e.g.* Stevenson, p. 854.

79.—*Ob.* Bust of Louis XVI, to right, in laureated periwig and armour. Legend: LUD. XVI D.G. FR. ET NAV. REX. *Rev.* The sun shining upon an orange-tree in a box; in the foreground a horse gallops, in the distance is a town. Legend: PRIVO [DI TE] MORIRO. In Ex. I.C.R., in brackets, dividing RE[CHEN] PF[ENING]. Size $4\frac{1}{2}$. *Jeton de pacotille* made at Nuremberg by Johann Christian Reich, *temp.* Louis XVI. The Rev. is copied from certain French jettons ranging in date from 1500 to 1725, and seems to have become popular: see, *e.g.*, Florange, *Armorial du Jetonophile*, 1902-7, I, 110; II, 153; and Feu Nos. 6031, 8666, 8670, 11099. In the original pieces the sun is bursting through clouds, and the *di te*, also omitted in this rudely executed little counter, appears in the legend.

80.—*Ob.* Bust of Louis XVI, to right, in toga and laureated periwig. Legend: LVD. XVI D.G. FR. & N. R. *Rev.* A

ship, to left, on a calm sea. Legend: ALB[ERICH] HÖGER RECH[EN] PFENIG. Size $4\frac{1}{2}$. Contemporary *jeton de pacotille* struck at Nuremberg by the maker named. The ship on the Rev. is perhaps that from the arms of Paris, perhaps merely a symbol of commerce. (Cp. Snel., Pl. V, 15.)

81.—Ob. A man, facing, seated at a cloth-covered table on which are jettons. The field of the coin is conventionally filled with other jettons. Mute. Rev. The alphabet in five lines; below the last 1533. Size $7\frac{1}{2}$. German *jeton de pacotille* made for use anywhere. The Ob. type shows a *Rechen-meister* sitting at his *Rechen-brett* (or *Rechen-tafel*) with his *Rechen-pfennigen* before him. On some pieces of this series the word *Rechen-meister* appears as a legend, and the lines, on which and between which to place the counters, are shown on the table. The Rev. type of an alphabet, which is regularly found on this class of jetton, perhaps represents a horn-book; this would suggest that possibly we have here a teacher of reckoning and reading. (For jettons on which the *comptoir* or counting-board appear see Feu., Nos. 194, 195, 1772, 3835, 3841-51, 10149; Font., p. 137; Piton, *Les Lombards en France*, 1892-3, I, 55, 83, II, 31, 58, 63, 66, 89; La Tour, pp. 146, 182; Van Mieris, *Histori de Nederlandsche Vorsten*, 1732, I, 261, II, 330; Dugniolle, Nos. 732, 744, 1233, 3997, 4098; Nagl, *Die Rechenpfennige und die Operative Arithmetik*, Vienna, 1888, Pl. III, fig. 50; Snel., Pl. III, 13, 14.) [Pl. II, 6.]

82.—Ob. A variant of No. 81. Undated, but of the same period. On the Ob. more jettons are shown upon the table, as is the bag in which they were kept and an account-book. The conventional jettons are absent from the field of the coin, and a tressure-like ornament occupies the spaces right and left of the *Rechen-meister*. Size 7. These, and the succeeding Classical, Allegorical, Political, and Biblical types of *jetons banaux* (Nos. 84-101) must have been in common use here in Shakespeare's time, and it was doubtless such pieces that are referred to in *As You Like It*,

II, vii, 63; *Cymbeline*, V, iv. 174; *J. Caesar*, IV, iii, 80; *Troilus*, II, ii, 28; *Winter's Tale*, IV, iii, 38; *Othello*, I, i, 31. As to the bag shown here, it was in bags or purses that counters were usually kept in France. (See Affry, *Appendices, passim.*) An example of these in England will be found in *Archaeologia*, XXXVI, 290, 292. Sometimes boxes were used: *e.g.* 'silver boxes for compters . . . and fourtie compters' formed part of a New Year's gift to Queen Mary in 1556. (Nichol, *Illustrations of Manners of Antient Times*, 1797, *fin.*) Or the jettons might be kept in a bowl: 'Item a standishe for count[e]rs.' (Inventory of La Mountroy College Wells, 17 March, 1546. *Inventories of Chantries in Somersets. Record Office: Exch. Q. R. Church Goods.* $\frac{8}{285}$ b. Evidences at the Munich Museum show that a basin was used in Germany. Occasionally the reckoning-table was furnished with a till for the purpose, as in the St. Gall board at Nuremberg. In the Low Countries cylindrical cases were the general fashion. (Van Loon, *Inleid'ing tot de Heedendaagsche Penningkunde*, 1717, Pl. p. 62. Affry, *Introd.* xviii.)

- 83.—*Ob.* Hercules and Pallas standing side by side, with their attributes. The latter is about to place a wreath on the head of the former in acknowledgment of his fetching the golden apples of the Hesperides. On the top of a column to the right is one of the apples dedicated as booty by Hercules to Pallas. Legend: HERCVLES ET PALLAS. In Ex. H.K. *Rev.* Neptune, trident in hand, borne over the sea on a dolphin; in the distance a ship sailing. Legend: NEPTVNVS. Size 8. *Jeton de pacotille* made at Nuremberg by Hans Krauwinkel. One of a series with types taken from Classical Mythology, issued during the last quarter of the 16th and the early years of the 17th century, and still often found in England. Some of the groups in this series were taken from gems. For Neptune on a dolphin *cp.* Raspe, *Catalogue of Gems*, 1791, I, Nos. 2556, 2567. (Snel., Pl. IV, 8.)

- 84.—*Ob.* Minerva, standing, with spear and aegis, attended by a

- lion and a boar. Legend: FRANGIT ET ATOLLIT. *Rev.* Procris, with her spear and dog, giving the latter to Cephalus. Legend: CEPHALVS. PROCRIS. In Ex. H.K. Size 8. *Jeton Banal* of the same series as No. 83. The Ob. legend is from Propertius, V, vi, 51, 'It is the cause that weakens or raises courage.' (Snel., Pl. IV, 16.) [Pl. II, 8.
- 85.—*Ob.* Meleager giving to Atalanta the head of the Calydonian boar, the carcass of which lies at their feet. Legend: MELIAGER[*sic*]. *Rev.* Apollo and Diana, standing, the former radiated and with his lyre, the latter with spear, bow, quiver, and hound. Legend: APOLLO DIANA. In Ex. H.K. Size 8. *Jeton Banal* of the same series as Nos. 83 and 84. (Snel., Pl. IV, 13.)
- 86.—*Ob.* Pluto, standing, with his staff in his left hand and Cerberus sitting by his right side. Legend: PLVTANVS. By his left foot is H.K. In Ex. 1582. *Rev.* Fortune, seated on her wheel, with Saturn, or Time, horned, bearded, winged, and goat-legged, bound and padlocked, in a leash before her; she holds his scythe in her left hand. Sun-rays burst through clouds on the right. Legend: FORTVNA VARIABILIS. In Ex. H.K. Size $7\frac{1}{2}$. Gilt. *Jeton Banal* of the same series as Nos. 83 to 85. For Saturn chained, *cp.* Raspe, No. 760. (Snel., Pl. IV, 15.)
- 87.—*Ob.* Pyramus and Thisbe sitting under a mulberry tree, the former wreathed and playing on a guitar, the latter holding up a mulberry in her right hand. Legend: QVID SVAVIS [blundered for *suavius*] AMORE. *Rev.* Thisbe throwing herself on a sword by the corpse of Pyramus. Legend: WOLF LAVFER IN NURNBERG. Size 8. *Jeton Banal* of the same character as Nos. 83 to 86 by another maker, as indicated in the *Rev.* legend. For the Ob. legend *cp.* Plautus, *Cistellaria*, I, iii, 45: *qui est amor suavissimus*. The *Rev.* type is perhaps copied from that of several Medalet-Jettons struck at Utrecht in 1574 with reference to the troubles suffered by the town that year: see Van Loon, I, 184-5. [Pl. II, 7.
- 88.—*Ob.* Romulus and Remus suckled by the wolf. Legend: REMVS ET ROMVLVS. In Ex. H.K. *Rev.* Faustulus

bringing the twins to his wife Laurentia; his dog runs beside him. Legend: REMVS ET REMVLVS[*sic*]. In Ex. 1601. H.K. in two lines. Size 8. *Jeton Banal*: one of Hans Krauwinckel's Nuremberg series of subjects from Roman History. The Ob. type appears on many Roman coins: see, *e.g.*, Stevenson, pp. 232, 529, 914, etc. [Pl. II, 9.

89.—Ob. Romulus killing Remus. Legend: REMVS ET ROMVLVS. In Ex. 1601. Rev. Samuel crowning David. Legend: SAMVEL ET DAVID. In Ex. H.K. Size 8. Another of H. Krauwinckel's *jetons banaux*, but a mule, the Ob. being Classical, the Rev. Biblical. [Pl. II, 10.

90.—Ob. Marcus Curtius, on horseback, leaping into a fiery chasm. Legend: MARCVS CVRTIVS. In Ex. 1601. Rev. The Consul Popillius Laenas, on the left, as ambassador to Antiochus, on the right; both figures standing, the latter with the circle drawn round him by the rod of Popillius. Legend: POPILIVS ROMAN[VS] LEGAT[VS] VIRGA REG[EM] ANTI[OCHVM] CIRC[VMS]CRIBIT. In Ex. H.K. Size 8. *Jeton Banal* of the same series as No. 88. For the Ob. type, *cp.* Montfaucon, II, Pl. 32, xviii. The Rev. legend is based on Livy, XLV, 12, *Popillius virga circumscripit regem*. (Snel., Pl. IV, 21.) [Pl. II, 11.

91.—Ob. Minerva, standing, helmeted, with spear and aegis. Legend: QVOS VVLT MINERVA BEAT. Rev. Two soldiers, standing, the one on the left holding up a sprig of laurel, the other addressing him; laurels growing in the ground by them. Legend: CONCEDAT LAVREA LINGVAE. In Ex. H.K. *Jeton Banal* by Hans Krauwinckel of Nuremberg: classical type. The Rev. legend is from Cic., *De Officiis*, I, xxii, 77. It appears also in this period on the Rev. of a medal of Pierre Vettori, of Florence, dated 1580, where Minerva and Neptune are discussing what name to give to Athens. (Durand, *Médailles et Jetons des Numismates*, 1865, p. 211.)

92.—Ob. Corn springing from the bones of men slain in war. Legend: SPES ALTERA VITAE. In Ex. c.k. Rev. Similar to that of No. 91, but here the warrior on the right has

the laurel in his hand, while he on the left is the speaker; on the ground between them is body-armour and a sword laid aside. Size $7\frac{1}{2}$. This allegorical piece is by Chilianus Koch of Nuremberg, c. 1570-90.

93.—*Ob.* A pseudo-classical warrior, standing to right, with a tilting (!) spear in his hand. Legend: NEC IGNI NEC FERRO CEDO. *Rev.* A unicorn, presumably stirring water with his horn. Legend: NIHIL INEXPLORATO. Size 8. *Jeton Banal* made at Nuremberg: late 16th century. The unicorn type is perhaps taken from the 13th Emblem of Camerarius, 1595; cp. Reusner's *Emblems*, 1581, No. 4. It refers, of course, to the belief that wild beasts would not drink from pools till the unicorn had stirred them with his horn, the antidote to every poison, and so driven away all venomous reptiles. (See, e.g., Guillim, *Display of Heraldry*, 1724, p. 163; and the *Bestiaries*, *passim*.) The faces of this coin respectively inculcate courage and caution. [Pl. II, 12.]

94.—*Ob.* A tortoise, on the ground, fitted with a mast and sail. Legend: FESTINALENTE. In Ex. WOLF LAVFER RECH: PE: *Rev.* Hercules carrying on his shoulders the Cretan bull. Legend: ASSIDVITATE ET TOLERANTIA. Size 8. *Jeton Banal* issued at Nuremberg by the maker named: late 16th century. The type of the *Ob.* was the device of Cosmo dei Medici, 1st Grand Duke of Tuscany, d. 1574. For the motto *Festina lente* (σπεῦδε βραδέως) cp. Suet., *Aug.*, 25; and A. Gellius, XII.

95.—*Ob.* A hand issuing from clouds, on the right, holds a sword in front of the Tables of the Law. Legend: LEX REGIT ARMA TUEN[T]VR. (The last word is blundered.) *Rev.* Valour, represented as a bearded and helmeted warrior with spear and parazonium, standing on the left, facing Honour, personified as a female, standing on a dolphin, with a cornucopiae in her right, and a spear in her left hand. Legend: HONOS ET VIRTUS. In Ex. H.K. Size $7\frac{1}{2}$. Another *Jeton Banal* by Hans Krauwinkel of Nuremberg. On the *Ob.* the *gladius Domini* is guarding the Law. The *Rev.*, which offers an unusual presentment

- of the two divinities named, is based on that of a 1st Brass of Galba: see Stevenson, p. 465; Montfaucon, I, Pl. 94, ix; Addison, *Dialogues upon Ancient Medals*, 1753, p. 36.
- 96.—*Ob.* Haman on foot and Mardocheus mounted. Legend: HAMAN MARDOCHE⁹. In Ex. ESTHER VI above crossed laurel branches, below which is H.K. *Rev.* A street of the city; Haman hanging on a high gallows. In Ex. DAS HAVS HAMAN in two lines. Size 8. One of a Biblical series of *jetons banaux* issued by H. Krauwinkel of Nuremberg. (Snel., Pl. IV, 1.) [Pl. II, 13.]
- 97.—*Ob.* The Scarlet Woman on the Beast; John and the angel to the right. Legend: MERETRIX BA[BYLONIS]. In Ex. APOCALIPS[IS]: CAP: XVII. H.K. in three lines. *Rev.* Fictitious arms of Babylon (*Three open crowns, each surmounted by an elephant*) in a 'German' shield ensigned with a large open crown. Legend: INSIGNI[A] CIVIT[ATIS] BABIL[ONIS]. Size 8. Another piece of the same series as the preceding. For the term 'German shield' see Grazebrook, *Dates of Shields*, 1890, Pl. I, p. 10. [Pl. II, 14.]
- 98.—*Ob.* Equestrian figure of the Emperor Charles V, to right, bareheaded (as Caesar: *cp.* Nos. 24, 27, 41), and with a commander's baton in his hand (*cp.* Nos. 24, 41). Legend: CAROLVS V ROM[ANORVM] IMP[ERATOR] SEM[PER] A[VGVSTVS]. In Ex. H.K. *Rev.* A shield of Austria-ancient (see No. 42) impaling Burgundy-ancient (wrongly shown: see No. 65), displayed on the breast of the double-headed eagle of the Empire with the *heiligenscheine* round each head ensigned with an arched crown; the whole between two columns, each sustaining an open crown. On scrolls just above the plinths are PLVS and VLTRA. Legend: VENI VIDI DEVS VICIT. Size 7½. *Jeton Banal* of a political or historical series issued by Hans Krauwinkel of Nuremberg. For the Columns of Hercules and the motto on the *Rev.* see No. 15. The model for this *Rev.* type is perhaps to be found in Charles V's medal of 1548; see Van Mieris, III, 208; and *cp.* the *Impresse* of this Emperor in *Le Sententiose*

Imprese of Symeoni, 1560, given in Green and Croston's Edn. of *The Mirrovr of Maiestie*, Holbein Society, 1870, Pl. 28. (Snel., Pl. IV, 22.)

- 99.—*Ob.* The Emperor (Rodolph II, 1576-1612) as King of Germany, enthroned under a canopy, between Justice and Peace with their attributes. In Ex. REX GER[MANIAE]. *Rev.* A 'German' shield bearing a single-headed eagle displayed, with the *heilighenscheine* round its head, surmounted by a crowned helm with mound and cross as crest and with scroll-mantling. Legend: INSIGNI[A] ROM[ANA] REGIS GERMI [blundered for *Germaniae*]. Size $7\frac{1}{2}$. Contemporary *Jeton Banal* similar in character to No. 98, and of Nuremberg make. The eagle on the *Rev.* should have been double-headed, as after the adoption of the latter by Sigismund (1411-37), the single-headed eagle was the distinctive bearing of the King of the Romans until he became Emperor.
- 100.—*Ob.* The King of Bohemia (The Emperor Rudolph II again) standing in robes of state with sceptre and orb, under a canopy, and flanked by cornuacopiae and laurels. Legend: REX BOHE[MIAE]. *Rev.* A 'German' shield of the arms of Bohemia (*gules, a lion rampant double queued argent*) with crowned helm, double-wing crest, and scroll mantling. Legend: INSIGNIA REGIS BOEMI[AE]. Size 8. Contemporary *Jeton Banal* of the same class as No. 99, and by a Nuremberg maker. For this same crest two centuries earlier see *L'Armorial du Heraut Gueldre*, No. 323.
- 101.—*Ob.* Equestrian figure of the Sultan of Turkey, to left, in turban and long robe. Legend: TURCKICHS [blundered for *Turckisch*] KEISER. In Ex. H.K. *Rev.* A quartered shield of arms, ensigned with an open crown: 1 and 4, 2 pales, on a chief as many open crowns; 2 and 3, an open crown. Legend: INSIGNIS [blundered for *Insignia*] CIVIT[ATIS] CONSTANT[INOPOLIS]. *Jeton Banal*, by Hans Krauwinkel of Nuremberg, of a similar character to Nos. 98-100. (Snel., Pl. IV, 23.)
- 102.—*Ob.* Three crowns and three lys arranged alternately round a rose (?) Legend: HANNS KRAUWINCKEL IN NVRENB[ERG].

Rev. The *Reichs-apfel* (mound, or orb) within a double tressure of three curves and three angles set alternately. Legend: GETRIVW HANDT KOMBT DURCH ALL. Size $6\frac{1}{2}$. *Jeton Banal* of the latter part of the 16th century, still commonly found in England, by the maker named. The same type of piece was issued by some of the other die-sinkers in Nuremberg (*e.g.* Nos. 104-5), first apparently by George Schultes, one of whose in my collection is dated 1553 (Font., p. 48.). The *Rev.* type is copied from the Rhenish gold gulden. It has been suggested that the origin of this form of tressure is to be found either in a succession of three Omegas or in a combination of three open Alphas and three Omegas. (Snel., Pl. III, 25 *et. seq.*) [Pl. II, 15.

- 103.—As No. 102 in type. The *Ob.* legend reads NVR. The *Rev.* legend is GOTTES GABEN SOL MANLOB. Size $5\frac{1}{2}$. [An *Ob.* of this type by Cornelius Laufer is shown in Pl. II, 16.
- 104.—The type is as Nos. 102 and 103. The *Ob.* legend is WOLF LAVFER IN NVRENBERG RECH P. The *Rev.* reads ANFANG BEDENKS ENDT. Size 5.
- 105.—The type is as Nos. 102-4. The *Ob.* legend is WVLF LAVER IN NVRNBERG. The *Rev.* reads GOTES SEGEN IST ALESC. Size 5.
- 106.—*Ob.* Bust of Mercury, to right, in toga and *petasus*. Legend: GLIK KUMPT VON GOT ISTWA. *Rev.* As that of Nos. 102-5. Legend: HANS SCHVLTES ZV NVRENB[ERG]. Size $5\frac{1}{2}$. *Jeton Banal*, for general use, by the maker named; of the second half of the 16th century, but the type may have been perpetuated for some time after 1600. The reason for the presentment of Mercury on a coin for keeping business accounts is obvious. (Snel., Pl. III, 30.)
- 107.—*Ob.* The doge of Venice and his wife, walking to the right, the latter holding a fan. Legend: DVX VENET[IAE] ET DVCIS[SA]. *Rev.* Within a wreath of lys (?) the winged lion of St. Mark, sejant, holding an open Bible, in which is inscribed PAX TIBI MARCO. H.K. Size 8. *Jeton Banal* issued by Hans Krauwinkel of Nuremberg, *c.* 1600, for general use, but perhaps in the first instance for Venice, as its type suggests. King, in his *Engraved Gems* (1885,

p. 96), considers that 'the Winged Lion of Venice was the device beyond all others the one for a merchant's signet,' and, in his opinion, this is the reason why it is found on these Nuremberg counters. Piton, I, 53, gives an illustration of the 14th century seal of a Venetian *bailli* at Tripoli bearing this emblem. [Pl. II, 17.

108.—*Ob.* A column, on the top of which is a statue representing the Inquisition. To the foot of the column the Belgic Lion is fastened, the collar round his neck bearing the inscription INQVI[SITIO]. A mouse, the Prince of Orange, is gnawing his bonds to free him. Legend: ROSIS LEON[E]M LORIS MVS LIBERAT. *Rev.* The Pope and the King of Spain (Gregory XIII and Philip II), standing; in front of them rears the Belgic Lion. The King with one hand offers the Lion an olive branch, in token of peace, but holds in the other behind his back the collar of the Inquisition. Legend: LIBER REVINCIRI LEO PERNEGAT. Size 8. *Jeton Banal* made in Germany in imitation of a Medalet-Jetton issued in the Low Countries in 1580. (Dugniolle, No. 2800; Van Loon, I, 274; Bizot, *Histoire Métallique de Hollande*, 1687, p. 42; Font., p. 154.) Our illustration is taken from the original Dutch piece. [Pl. II, 18.

109.—*Ob.* A landscape, with buildings indicating various occupations, and men working at a pump or well; in the foreground rises a tall pine-tree, at the foot of which two cornuacopiae shed their contents upon the ground. Legend: IN MULTIS FERTILIS. *Rev.* A pair of empty scales equally poised by a right hand issuing from a cloud. Legend: PONDERE VIRTUTIS LIBRANDA NEGOTIA CUNCTA. Size 8. Flemish Medalet-Jetton commemorating the final cession of Cambray to France in 1678. The *Ob.* apparently is symbolic of prosperity; the *Rev.* of justice. (Dugniolle, No. 4403; Van Orden, No. 1358; *cp.* Addison, p. 195.) Red metal is a characteristic of the counters of the Low Countries. [Pl. II, 19.

110.—*Ob.* Shield of arms, with helm, crest, and mantling, of Jean Heymans. Mute. *Rev.* The double-headed eagle of the

Empire, bearing on its breast a shield of Austria-ancient, and holding in one beak a chaplet, in the other an olive branch, in one claw a sword, in the other a crescent. Legend: VNA FERIT LVNAM VICTRIX FERIT ALTERA PACEM. Size 9. Medalet-Jetton, probably of the year 1687, referring to the war against the Turks, to which the additional symbols and the legend on the Rev. allude. According to Van Loon the arms on the Ob. are those of Pierre Ferdinand Rose, councillor of Brussels. (Dugniolle, No. 4436, and *cp.* 4405, Notes 2, 3; Van Loon, III, 299, and *Inleiding &c.* p. 179; Van Orden, *Nederlandsche Historie-penningen*, 1825-30, No. 1369.)

111.—*Ob.* Shield of the arms of Saxony: ten quarterings. Mute. *Rev.* The field is occupied by an inscription and date, in six lines:—OMNIA | CONANDO | DOCILIS SO|LERTIA VIN|CIT : | 1582. Size 7. No. 8580 in Neumann's *Beschreibung der bekanntesten Kupfermünzen*, 1858-72. German Jetton. Neumann merely describes this piece and gives no information about it. The hexameter on the Rev., however, is from Manilius, *Astronomica*, I, 95.

112.—*Ob.* A starving, dishevelled, and tattered man, eating with his left hand and holding bones in his right. Legend: EGO MAGIS MIHI QVAM ALIIS NOCEO. *Rev.* A 'German' shield of arms with Saxon quarterings:—(1) an escarbuncle; (2) a lion rampant sinister; (3) a single-headed eagle displayed; (4) 2 pales; over all an escutcheon of Saxony (Barry of ten, or and sable, a crancelin vert.); ensigned with a large open crown, of fanciful design to match the shield. The shield divides the letters G. A. S. H. and the date 1621. No legend. Size $7\frac{1}{2}$. German Medalet-Jetton. Not in Neumann. The quarterings shown here were borne by several of the branches of the Ducal House of Saxony. If they represent the coat of Saxe-Lauenburg, Prince-bishop of Paderborn, an explanation of this jetton suggests itself, but is offered merely as a conjecture. 1621 was the year of the ravages of the Protestant leader Christian of Brunswick in the diocese of Paderborn during the Thirty Years' War, and the piece may be a *Hungersnöthe médaille* referring to the famine thus caused. In

that case the Ob. legend perhaps points to the sufferings of the invaders from the effects of their own devastation. On this class of piece see L. Pfeiffer, *Pestilentia in Nummis*, Tübingen, 1882. (On the other hand, the letters G. A. S. H., naturally suggest *Gustavus Adolphus Sueviae Heros*, but the date seems too early either for this or for a Protestant Saxon medalet.)

- 113.—*Ob.* Shield of Arms of Pfeiffer, with coroneted helm, crest, and scroll mantling. Legend: J. A. PFEFFER COM. M. M. Z. Z. 1766. *Rev.* Two men working in a mine, from the roof of which hangs a lamp; in the background is a landscape with buildings. Legend: INDICANT ALTISSIMVM PROFVND. Size 7. Jetton of Johann Anton Pfeiffer, coin-master of the Gild (*Communion-Münzmeister*) from 1763 to 1773. The pepper-tree in the arms on the Ob. forms a canting coat on the name of the bearer: *cp.* Spener, *Insignium Theoria*, 1690, Pl. 16. The mine on the *Rev.* is, of course, an appropriate symbol. (Neumann, 3I765.)
- 114.—*Ob.* Bust of Augustus, to left, with radiated crown. Legend: C[AI] CAESAR[IS] DIVI [FILIVS] AVGVSTVS IMPE[RATOR]. *Rev.* On a round-based shield, between laurel branches and ensigned with an open crown, a bend sinister charged with the letters S P Q R. Legend: INSIGNIA CIVITATIS ROM[ANAE]. Size 8. *Jeton Banal*, probably of German make, and one of a series of such pieces apparently issued late in the 17th century. Most of them are distorted imitations of ancient Roman money; this example, however, combines an Ob. of that character with a *Rev.* apparently suggested by the silver *Grosso* of the mediaeval Roman republic: 11th to 13th century.
- 115.—*Ob.* Bust of Domitian, to right, laureated. Legend: IMP[ERATOR] CAES[AR] DOMIT[IANVS] AVG[VSTVS] GER[MANICVS] CO[N]S[VL] XII CE[NSOR] PER[PETVVS] P[ATER] P[ATRIAE]. Below the bust 12. *Rev.* A lighted altar (*ara salutis Augusti*). Legend: SALVTI AVGVSTI. In Ex. s.c. Size 8. A jetton of the same series as No. 114, but of better execution and in character a more faithful imitation. (*Cp.* Stevenson, p. 73.)
- 116.—*Ob.* Bust of Anna, Empress of Russia, to right, crowned.

Legend: ANNA D. G. RVSSOR[VM] IMPERAT[RIX]. *Rev.* The Empress enthroned, with the shield of Russia by her side; she is crowned by Victory, and vanquished enemies make obeisance and offerings to her. Legend: DONAT VICTORIA TANTA. In EX. I. I. D. RE. PF. Size 7. Contemporary *Jeton Banal* made at Nuremberg by Johann Jacob Dietzel. The *Rev.* commemorates the Russian victories of 1739.

- 117.—*Ob.* Bust of Charles II of England, to right, with long hair, laureated and wearing the toga. Legend: CAROLVS II D.G. MAG. BR. FRA. ET HIB. REX. *Rev.* The shield of Great Britain ensigned with an arched crown; the marshalling being (1) England, (2) Scotland, (3) France, (4) Ireland, an irregularity due no doubt to avoid crowding. The arrangement should have been 1 and 4 grand quarters, France-modern and England quarterly; 2 Scotland; 3 Ireland. Legend: COUNTERS CONR[AD] LAUFERS RECH[EN] PFENING. Size 8. Contemporary *Jeton Banal* issued at Nuremberg by the maker named. The portrait of the King apparently was copied from that on his milled silver coins, first issued in 1662. (*Cp. M.I.B.H.*, I, p. 494, No. 121.) [Pl. II, 20.]
- 118.—*Ob.* Bust of William III of England, to right, in laureated periwig and toga. Legend: WILH[ELMVS] III D.G. ANG. SCO. FR. ET HI. REX. Below the bust L.G.L. RECHEN PF[ENING]. *Rev.* Bust of Mary II, to right. Legend: MARIA D.G. ANG. SCO. FR. ET HI. REGINA. Size 8. *Jeton Banal* made at Nuremberg by Lazarus Gottlieb Lauffer in 1689. (*Cp. M.I.B.H.*, I, p. 692, No. 86.)
- 119.—*Ob.* and *Rev.* types and legends as those of No. 118, except that the *Rev.* legend has so., blundered for sc., and ET is shortened to E. The maker's name, etc., is on the *Rev.*, and reads L.G.L. R[ECHEN PFENING]. Size 5½. In character and date as the preceding piece.
- 120.—*Ob.* Bust of George I. of England, to right, in armour and laureated periwig. Legend: GEORGIVS M. BR. FR. ET HIB. REX. Below the bust L. *Rev.* Equestrian figure of St. George, to left, slaying the Dragon. Legend: FIDEI

DEFENSOR ET AEQVI. Size $6\frac{1}{2}$. Gilt. Medalet-Jetton made at Nuremberg by Johann Gottlieb Lauffer in imitation of one of the Coronation Medals of George I (31 Oct., 1714). The explanation of the Rev. type and legend is that the King, as St. George of England, slays the Dragon of Popery and uncontrolled Prerogative, *i.e.* the Jacobite party. (*M.I.B.H.*, II, p. 425, No. 13.)

This piece is by no means to be regarded, owing to its date and character, as necessarily being merely a counter for play; for though it might be difficult to prove that any general use of the Jetton in keeping accounts lingered on in this country so late as 1714, except in the special instance referred to below, there seems no doubt that on the Continent its more serious and original purpose, though dying out, survived, at least in France and Germany, throughout the 18th century, and our little medalet-counter, No. 120, may well have been one of a set popular in George I's German dominions; for a generation later the *Rechen-pfenning* and *Rechen-brett* had not yet fallen into desuetude in Germany. From Bettina von Arnim's *Goethe's Briefwechsel mit einem Kinde* (Berlin, 1837, Pt. 2, p. 250), we learn that a *zahl-brett* with its *zahl-pfenningen* existed in Goethe's paternal home in the fifties of the 18th century. For Goethe, as a child of seven, "no toy held so much fascination as his father's reckoning-board, on which he copied with the counters the position of the stars; and he would place the board by his bed, and so believe himself to be brought more immediately under the influence of his favourable stars."

The English Exchequer Table and its late survival, apparently on ceremonial occasions, has been discussed by Mr. Hubert Hall in his *Antiquities of the Exchequer* and elsewhere; as to which it may be added here that Snelling, in his Preface, speaks of the process as being still in annual use at the Exchequer at the time of his writing (1769), and that Daines Barrington, in *Archaeologia*, IX, 28 (10 May, 1787) states that it had then been discarded there about two years.

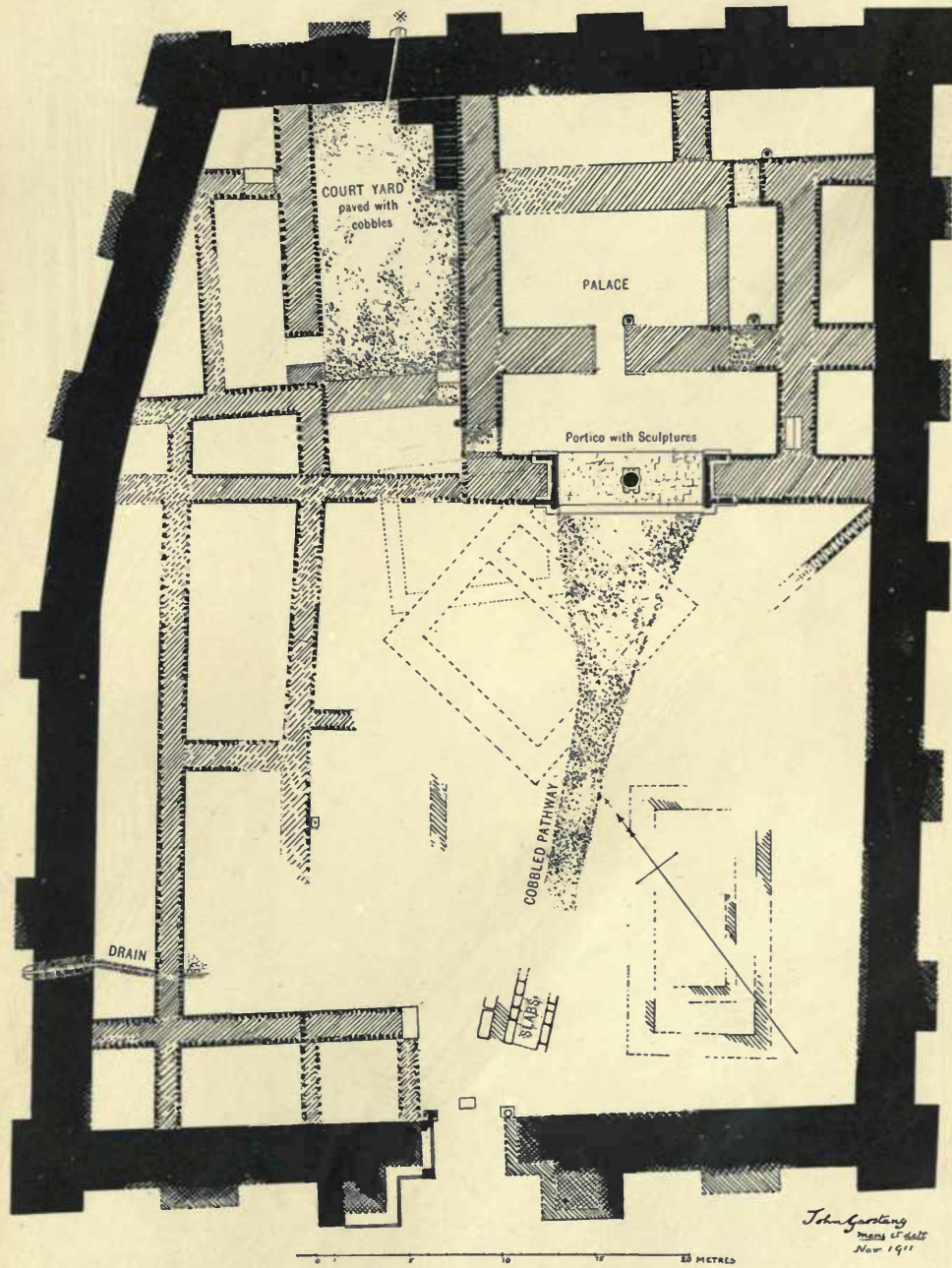
Even this little list testifies to the extraordinary variety of interest and wealth of allusion possessed by the Jetton; and I may perhaps be forgiven for having abandoned the task which I once set myself of describing on a similar scale the 7,000 specimens already in my cabinets. The Jetton may be considered both in its medallic and in its arithmetical aspect: the former has received the more attention from modern scholars. In France, especially, it has been much studied from the numismatic point of view. References to the counter in each of its senses, of counting-board and counting piece, are numerous in literature, as well as in wills, inventories, and other records, from the 13th to the 18th century inclusive; and such allusions would doubtless be more common still, were it not that, to paraphrase the words of Vegetius,* men leave unmentioned what in their day is universally known and of too ordinary a character to call for notice. There exist, moreover, a number of works dealing with the processes of ocular arithmetic, from those of Huswirt, Reisch, Siliceus, Cusanus, and Köbel, in the later years of the 15th and early years of the 16th centuries, down to the last edition of Legendre in 1753, itself† a proof of the continuance of the method, and which shows how the lined and spaced board, or cloth, could be dispensed with and the Jetton used alone by means of what was called the Tree of Numeration, a variety of procedure explained by Trenchant nearly two centuries before, and known in the 15th century, as is seen from the *Liure des Getz*. I hope presently to give some account of the *Comptoir*, or Counting-board, and of the Reckoning-cloth, on which the Jetton was used, and of both of which a few examples remain in Continental Museums.

* I, viii.

† Apart from the statement of the author: p. 497.

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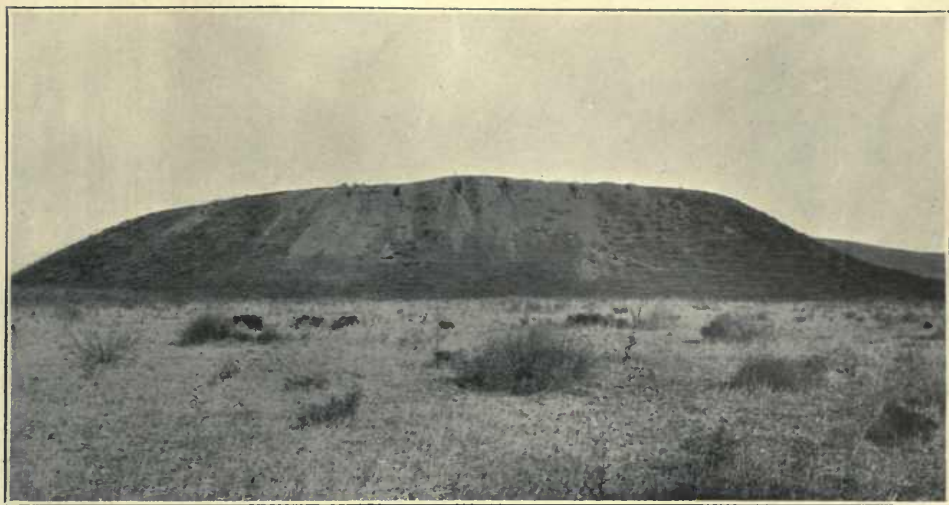
SAKJE GEUZI: THE ROYAL CITY.



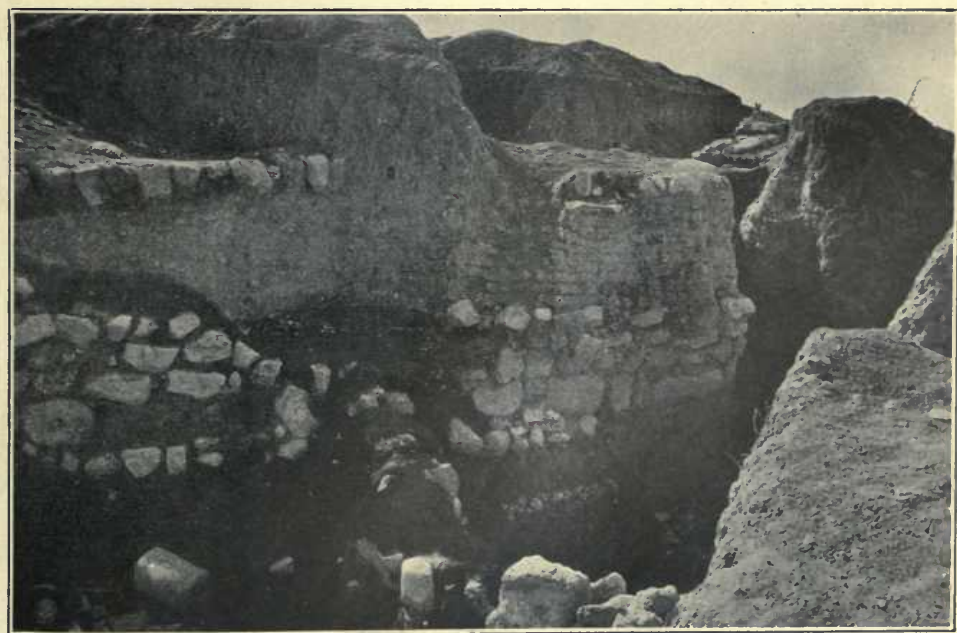
PLAN OF THE PALACE AND ENCLOSURE.

SAKJE-GEUZI: SONGRUS EYUK.

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THE MOUND AT THE BEGINNING OF EXCAVATIONS, 1911.



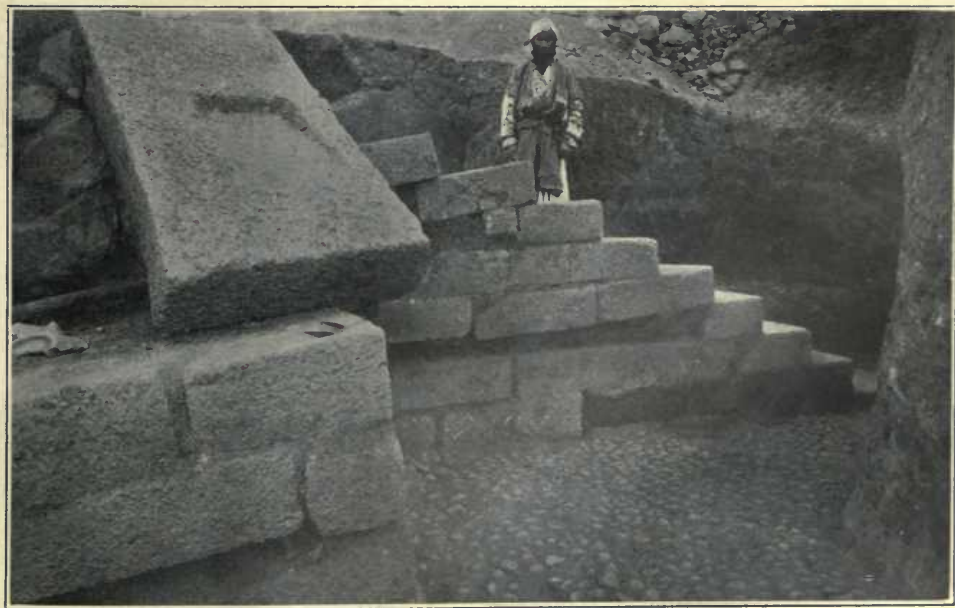
NORTH END: SUPERPOSED WALLS AND POSTERN.

SAKJE-GEUZI: JOBBA EYUK.

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WEST SIDE OF THE MAIN GATEWAY, SHOWING CORNER-STONE AND SOCKET.



STEPS LEADING UP TO THE RAMPARTS FROM PALACE COURTYARD.

SECOND INTERIM REPORT ON THE EXCAVATIONS AT SAKJE-GEUZI IN NORTH SYRIA, 1911

WITH PLATES III, IV, V.

BY JOHN GARSTANG

PRELIMINARY

In the first volume of this Journal, 1908, p. 97 *et seqq.*, we gave a preliminary report of the results of the experimental excavations made by us in that year in the mounds of Sakje-Geuzi, Turkey in Asia. The importance of the results then obtained led to the formation of a standing Hittite Excavation Committee, with Mr. Robert Mond, M.A., as hon. treasurer, which includes, amongst its members, also:—Ralph Brocklebank, Esq., J.P., the Right Hon. Sir John Brunner, Bart., Freiherr von Bissing (Munich), Rev. W. Macgregor, M.A., Claude G. Montefiore, Esq., C. Sydney Jones, Esq., Sir Edwin Pears (Constantinople), Major E. Rhodes, D.S.O., Rev. Professor Sayce, D.Litt., Dr. Waldemar Schmidt (Copenhagen), James Smith, Esq., Henry S. Wellcome, Esq.

The Committee determined that it was desirable to continue, and so far as possible complete, the excavations. Accordingly, last year a new Expedition was equipped, the expenses of which were largely borne by the members of the Committee. Two student members of the party, Mr. Hamilton Beattie and Mr. W. J. Phythian Adams, also made a generous contribution towards the funds. As on previous occasions the expedition had the advantage of the voluntary and able services of Dr. Arthur Wilkin, to whom the members of the staff are personally much indebted. The photography and artistic work was again in the skilled hands of Herr Schliephack in his capacity as chief assistant. Mr. R. Horsfall, who had gained previous experience of excavation at Meroë, completed the party.

Our special gratitude is due to Mr. Robert Mond, both for his generous contributions towards the funds required, which proved for local reasons to exceed considerably the original estimates, and

for his valuable advice and assistance in the progress of the work and in the details of equipment. At his suggestion, we employed an aerial railway, which has proved a great saving of labour. The machine was designed and made for us at cost price by R. White and Sons, of Widnes.

In Constantinople, Sir Edwin Pears gave us his never-failing help in the negotiations with the Ottoman Government. In this connection the Secretary for Foreign Affairs lent his support, so far as diplomatically possible, and thanks to his good offices, His Britannic Majesty's Ambassador at Constantinople, and Consuls at Adana, Alexandretta and Aleppo, gave unflagging attention to our requirements. This official interest was particularly helpful during the time of tension on all hands that followed the outbreak of the Turco-Italian War. We cannot express too highly our appreciation of the consideration extended to us by H.E. Halil Bey, Director of the Imperial Ottoman Museum, and by the Governors of the provinces of Adana and of Aleppo.

The conditions of work were much the same as on the previous occasion. To avoid the intense heat of August, we made our plans to arrive at the beginning of September, and enjoyed the delightful weather of the Syrian autumn, until towards the close of our stay at the end of November. We were also able to secure, at this season, an adequate number of labourers, partly from the locality, chiefly Kurds and Armenians, partly Circassians from villages in the plain, and some Armenians from Marash. We owe an irredeemable debt to the Rev. Dr. E. Merrill, of Aintab, and the Rev. Dr. F. Goodsell, of Marash, who gave us their unfailing help, sympathy, and service throughout.

Summary of previous results

For description of the site and physical geography of the district, see Vol. I, pages 98-100. The mounds, as may be seen from the plan there reproduced (Plate 33, Vol. I), are arranged roughly in a circle around that which is marked *A*. The largest of all, lettered *B*, is called Songrus Eyuk, a name possibly derived from its conspicuous size. It was in this that our work was begun on the present occasion, having on the last visit tested its character by trial trenches, and disclosed signs of ancient building. In

mound *C*, Kefridiz Eyuk, we had also found a well-built wall of Hittite character, presumably the main defence of the Acropolis. But it was in mound *A*, Jobba Eyuk, that our work, on that occasion, was chiefly concentrated. In this one, we had picked up here and there the general line of an outer defensive wall, and in particular had laid bare, towards the north-eastern corner of the enclosure, a palace portico, ornamented with an exceptionally fine series of Hittite sculptures, which included splendid examples of the familiar Lion Corner Stones, followed by processions of mythological creatures, as well as the figures of the King-Priest and his attendants. Facsimile reproductions of these from paper-moulds, the work of Mr. Schliephack, are now being set up in the new Hittite gallery of the Liverpool Public Museums.

This small mound was readily accessible, for since Hittite times only the central portion seems to have been continuously occupied, and it was only here and there in the remainder of the area that the excavation was hampered by later uninformative buildings. Outside the main north-eastern wall, we had cut a trench straight through the slope, into the heart of the mound, and penetrated down to its origins in neolithic times. From this trench a welcome series of distinctive pottery fragments had been duly registered, and instructive data had been obtained by comparison with fragments found inside the area, and particularly with those found in and below the palace portico, which could be approximately dated to the eighth or ninth century B.C. In every way, it seemed to be important to continue this investigation.

Songrus Eyuk

This great mound, rising 160 feet above the plain, proved to be almost entirely artificial. In form, it is roughly oval at the base, being some 600 or 700 feet in length, and 500 feet in width. It has grown up near a small stream which flows around its eastern and northern sides, and there is a good spring of drinking water within 100 yards in that direction. Its sides, for the most part, are extremely steep, representing much more than a natural slope, suggesting at once to the eye that it was held up artificially by walls and revetments of successive periods, which indeed proved to be the case. At the southern end the slope is much less pronounced, and

this end is naturally most used for climbing to the top at the present time. It proved to have been so used from the beginning, for the ruins of the gateways of various periods were found in excavation at that point. On the top, there was a more or less level surface, in dimensions, roughly, 400 to 500 feet, highest towards the west, generally oval in form but ending somewhat sharply at the north end. There does not seem to have been anything like a complete or permanent occupation of the mound since the Seleucid period, of which we unearthed a splendid ashlar wall leading on to a gateway and tower. In the highest part of the mound, about the middle of the western side, there came to light an almost complete building of about the same period, in the first or second century, B.C. Its walls stood underground almost perfect; they were built of mud brick upon foundations of stone. The corners and door-jambes and the topmost course of the walls were also of stone. This is an interesting local style of building still in vogue in the locality, and it was probably employed in much earlier times. Hittite traces were come upon at about 20 feet in depth,* and the foundations of houses at 28 feet. It was, of course, impossible to clear the whole of the mound down to this depth, so we had to be content with a series of broad exploration trenches, following up so far as possible such walls as were found.

In this way we were able to cut down the western edge of the mound to a depth of about 40 feet. Hittite evidences were still being found at this level, and we have no reason to doubt but that they continued to lower levels; indeed our further exploration of the slope of the mound showed that the lowest interior buildings that we reached were hardly as old as the XVIIIth Dynasty (1500 B.C.), whereas a much older system of defences may be inferred. Around the mound, we traced three main periods of Hittite defensive walls; the uppermost just before the Egyptian XXVIth Dynasty and therefore of the latest Hittite period; another at a much lower level, two stout walls together, seemingly related to one another and dated by a distinctive Egyptian object between them to the XVIIIth Dynasty. The lowest and oldest wall, though single, was of similar character, but we failed to find any independent evidences as to its actual date, and were perplexed by intrusive objects and by ruins that had slipped down the steep slope to this point.

* Below our highest point; actually some 13 feet below the surface.

Other walls were indicated between those of the latest and second period, but the superposition of the remains made it impossible to trace them. In general, the construction of these defences corresponds with what was observed at Sinjerli, namely, a stout wall built upon heavy stone foundations, carried up with brick courses, with the slope of the mound below supported by heavy revetments. The lower courses, as a rule, had been built with burnt brick, and in one section the whole space between the two walls of the 15th century B.C. seemed to have been packed with the same burnt material. In the latest wall, however, and in the house-walls, no burnt brick could be traced; but in other respects the principle of construction was much the same. The variations in sizes of bricks were duly noted.

The entrance, at all times, seems to have been from the south. The gateways were located, and three distinct periods can be recognised; but it is not certain whether it will be possible to completely disentangle their plans, upon which we are still at work, for it would appear that owing to the continuity of occupation, the standing walls of a previous age were sometimes made to serve as part of the gate towers of that which succeeded. In general, however, their character may be recognised, and it accords entirely with what is known of Hittite gateways elsewhere, as at Sinjerli, namely, a flanking tower on either hand of a narrow entrance, projecting only slightly beyond the alignment of the wall itself. It is also noticeable that the main wall as it approached the gates, and the towers themselves, were all constructed of stone.

At the further end of the mound, there seems to have been, in later Hittite times at any rate, a postern leading down to the stream and spring. For the period, it lay extremely deep, and was difficult of excavation, being superposed with structures of several later periods, a fact which also complicates the plan of that portion of the mound. Several cylinder seals of Hittite character were found in this mound, and an object of much interest is a terra cotta head wearing the 'Phrygian hat,' possibly from a later Mithraic group; it came from the northern postern. A deposit of Syro-Hittite vases was found just between the main walls of the XVIIIth Dynasty period. In the excavation of the interior, instructive and important evidence was obtained from painted fragments of pottery found at various depths in the Hittite and post-Hittite strata. The

importance of these is largely increased by comparison with the results obtained in the excavation of the palace site in the smaller mound.

Jobba Eyuk

In Vol. I, pages 101 to 105, we have already described the general appearance of this mound, and the character of the main buildings found within it. The arrangement of the sculptures and character of their art are described on pages 107-110, with plan and photographs. We do not need, therefore, to delay further with these details.

On this occasion, we decided to complete the examination of the mound, which is comparatively small in area, and rises only, at its highest point, some 10 or 11 metres above the ground. The main wall was followed all round, enclosing a quadrangular area, 130 metres by 100. Its form was quite regular with the exception of the north-western corner, where, following probably an earlier contour, the western wall inclined slightly inwards. The main wall was three metres in thickness, and it was strengthened at frequent intervals by external buttresses of quadrangular form, with a projection of nearly a metre. The interval between the buttresses was least where the slope of the mound was greatest, as may be seen from the completed plan which we reproduce on Plate III. It will be noticed that the buttresses around the corners give almost the appearance of extra-mural towers.

There was only one main gateway, in the middle of the shorter side: this was well preserved at one side but very ruinous at the other. Sufficient traces remained, however, to enable us to recover the plan. The flanking towers may be seen to have projected externally but not internally. On the inner side, there remained in position a great stone socket for supporting the wooden post upon which one of the gates would swing. The façade of this entrance had clearly been decorated with sculptures; and we found the original place of that fine group of a Royal Lion Hunt, with the king shooting from his chariot, now in the museum at Berlin. We also recovered the fragments of another group, which seems to have been almost a replica of that one, as well as other sculptures, chiefly of lions, which probably continued the scheme of decoration. At this point the surface of the ground had become worn low, so that

many fragments of sculpture lay only just beneath the surface; indeed, only a metre of earth covered the Hittite gateway.

Passing into the interior, the level rises, so that over the central portion and the site of the palace, 2·50 metres of earth had to be removed before the foundations could be displayed. The work was completed, nevertheless, before we left; and the plan shows all the foundations that could be traced. The area covered by the actual palace is 22 metres square, and its main walls may be seen to be of remarkable thickness, about 2·50 metres. Passing through a sculptured portico, the plan of which we reproduced in Vol I, Pl. XXXIX, we reach the outer hall which opens out left and right in the style still perpetuated in many official buildings of the country. To the right hand, a stairway of sculptured slabs led up to the floor of a room at a higher level. The decoration of the slabs included the rosette and other conventional patterns. On the side of the hall opposite the entrance are two doorways, both leading to two chambers beyond, which, in their turn, give way to rooms abutting against the main outer wall. The sides of this central doorway seem to have been freely decorated with the same style of sculptured slabs. It may be presumed that the great chamber beyond was one of the state apartments. The positions of the doorways are indicated by a socket stone in each case, which reproduces, on a smaller scale, the principle of that discovered in the outer gateway.

The doorway leading out from the left of the entrance hall gave access to a courtyard paved with cobbles. From this, a well-built stairway of stone steps led up to the main wall, around which there was presumably a walk behind the ramparts. At the foot of this stairway, a stone drain led through the thickness of the main wall, with an outlet projecting through the further side. Similar drains have been traced in other places around the walls. The interior, as originally laid out, fell away from the entrance of the palace, which was about its highest point, towards the walls, thus ensuring a proper drainage.

Following out the plan, it is seen that down the west side a double row of chambers is almost continuous, and there is a suggestion that this was the scheme of the whole interior. Unfortunately, towards the eastern side the interference of concreted walls and foundations of Roman period made it

practically impossible to recover more than a suggestion of the original arrangement of the buildings on that side. In the centre also, as described in our preliminary report, the buildings of three successive periods are superposed so that it was a matter of considerable difficulty to reach the Hittite level at that spot. We ascertained, however, with certainty, that the cobbled pavement which leads from the portico continued through the centre of the enclosure and led on directly towards the main gateway. It is thus to be inferred that the central portion of the area was open and free from buildings, while, in general plan, the palace buildings and offices were ranged in a double or maybe treble row around the inside of the main walls. The general scheme, therefore, recalls that of the great contemporary palace at the foot of the Acropolis at Boghaz-Keui in Asia Minor. The cobbled pavement to which we have alluded as leading from the palace portico outwards towards the main gate, was found to end in a pavement of sculptured slabs, like those found inside the palace; but it is not clear that this is an original feature, though it may have been a reconstruction of Hittite times.

With regard to construction, both the main walls and, for the most part, the palace walls, had a foundation of stone but were carried up in brick, the lower courses of which, at any rate, were burnt. The main wall was faced with irregular five-sided blocks, roughly dressed, corresponding in some degree with the great Hittite walls of the capital. The inner face was much the same, with a solid rubble and stone packing between. These foundations seem to have been brought originally to a common height, so that where the ground was highest there was perhaps only one metre of stonework, whereas on the north-eastern side, where the slope is sharp, there still remain three metres of solid masonry. Above this, the first courses of brick were usually large slabs, upon which the brick wall was carried up and still remains in some places eleven or twelve courses high. We took the utmost pains to trace these walls amidst the accumulated débris, and were helped as the season drew on by occasional rain, which served a most useful purpose in lining out the brickwork.

The principle of construction in the interior walls of the palace was practically the same, but the stonework was less massive; in fact, the facing stones of the foundation were comparatively small.

The thickness of the wall above the foundations would seem to have been at least half a metre less than the foundations themselves. The large brick slabs upon the stone bed are only found in the case of the main side wall of the palace; while in one case, which we indicate in the plan, the foundations themselves were of brick. In a few cases, a considerable height of fallen wall could be traced in the cuttings, where the face of the wall, though fallen from its position, remained true, and was further marked by a solid coating of stucco. This showed as a straight white line in the earth, and served, not infrequently, as a useful indication. Another instructive detail was the discovery of some of the rain trough-stones from the roof, which had settled down, with the gradual subsidence of the walls, to a height of about two metres above the foundations. This enabled us to estimate that the original building was one-storied and about 4·50 or 5 metres in height; assuming always that there has been no serious disturbance or denudation of the ground above the site of the palace.

As on the previous occasion, some instructive small objects were recovered, and their testimony is doubly valuable in this case, where approximate dates have already been determined. These included seals, stamps of various kinds, sealings with Hittite hieroglyphs, a stone with signs upon it, and a variety of painted vase fragments, as well as a quantity of ordinary implements.

On the outer side of the north-east wall, at the spot marked with an asterisk, alongside the section described as trench A (Vol I, page 110), Mr. Hamilton-Beattie and Mr. Pythian-Adams undertook the supervision of a new trench in which we decided upon a more minute system of registration, to secure from the valuable mass of pottery fragments at that point as complete a record of the stratification as possible. They examined every cubic half-metre of ground from the outer end of the slope inward to the main wall and down to the virgin earth. Several thousands of vase fragments were discovered and recorded, and they are still at work analysing and studying the results. On the whole, not so much painted ware was found in this new trench, but on the other hand, a greater number of vases could be completely restored. At the bottom of the cutting, within a metre of the place where on the previous occasion we found extensive neolithic hearths and floors, we now found foundations of a house and burial cists, unquestionably of neolithic period.

With regard to the main historical points, the palace and main wall are without much doubt contemporary with one another, and belong to about the 9th century, B.C. Below the palace, we have been able to get down to older walls, but it is impossible to say that they belong to anything other than ordinary dwellings of an earlier period. We do not even know that they represent a Hittite occupation; but this is a reasonable inference from our study of the pottery of the site, which presents an unbroken continuity from post-neolithic times down to the palace period.

We are able, during the brief time which has been available since our return, to so far co-relate the results of our excavations in these two mounds, as to feel sure that we have the evidence before us which will enable us to identify in the accumulation of pottery outside the main wall that stratum, or series of strata, which corresponds to Egyptian XVIII Dynasty, about 1500 B.C. There is no suggestion, in our exhaustive examination of this mound and thorough testing of the greater one, of anything other than a continuous Hittite occupation from post-neolithic times until (and including) the period of the palace, which arose during the revival of the Hittite states of Syria in the early part of the first millenium B.C. We hope at an early date to publish a complete report of this excavation with a full series of plans and photographic illustrations corroborating these conclusions.

One further point may be touched upon. On p. 113, Vol. I, the Editor of the *Annals* suggested an alternative interpretation to the conclusion we came to as to the lime revetment we noticed supporting the main wall on the north-eastern side. He suggested that it was the result of an accumulation of limestone chippings, formed by trimming or dressing the outer face of the wall after the stones were in place. We have, however, tested this point, and found our original observation substantiated. The revetment is not only a definite feature of the construction, but it has been regularly designed, and in some cases great slabs of hard lime or concrete have been laid in regular herringbone fashion within it. There is, however, a preponderance of free lime. The fact that the stones which form the face of the wall are of volcanic rock in any case dismisses the alternative explanation; but, following up the suggestion, a careful examination revealed a narrow stratum of wall-chippings just below the lime revetment.

THIRD INTERIM REPORT ON THE EXCAVATIONS AT MEROË IN ETHIOPIA

BY PROFESSOR JOHN GARSTANG, D.Sc.

WITH PLATES VI—X

The second interim report, on the results of our second expedition to Meroë in the Sudan, appeared in the *Annals of Archaeology*, Vol. IV, pp. 45 to 71, with plates vi to xvi.

It will be recalled that, amongst other pieces of work, we traced the outline of a Royal City and excavated within it two palaces, as well as several other smaller buildings. It was clearly desirable to concentrate our work for a few seasons upon this central area, so that, with the exception of a few outstanding pieces of investigation, nearly all our excavation during the past season was carried on within the boundaries of these city walls. (See Vol. IV, Pl. ix.)

It is gratifying to note that the Committee, who generously provide the funds necessary for this work, were constituted as for the previous expedition, and were further strengthened by the inclusion of Sir Edmund Walker, of Toronto, and Dr. Jacobsen, of Copenhagen. A contribution of £1,000 from the National Arts Collection Fund, on behalf of the British Museum, helped materially towards realising a sufficient sum of money to resume the excavations upon an adequate scale. The Government of the Sudan, represented in particular by the Director of Railways and the Conservator of Antiquities, gave us from first to last their never-failing encouragement and assistance. In camp we were rather short-handed, the party consisting only of Mr. Schliephack, Mrs. Garstang, and myself. We had not, on this occasion, the advantage of Professor Sayce's swift insight and stimulating companionship; and other friends and helpers who had come on the previous occasion were prevented by various circumstances from joining us. We had, however, our old staff of skilled workmen from Egypt, and their increasing experience proved an invaluable asset. We also employed advantageously and with economical results a cable-way designed and made for us at cost-price by R. White & Sons, of Widnes, and several lengths of light railway lent by the Government.

The Royal City

It will be seen by comparison of the old plan with the new (see the accompanying plate No. VI), that during the season considerable progress has been made towards recovering the former arrangement of the site. Many of the buildings shown in it, however, are of later period than others, and we have still to develop a plan of the city as it was originally laid out. We have, however, now obtained evidence sufficient to show us the manner in which it grew, and to enable us to discriminate between the buildings of three definite periods. Accordingly, our first efforts were directed to a systematic excavation of surface buildings occupying the higher pieces of ground within the area, with a view to removing these and examining the earlier structures below them. Two such mounds were conspicuous; the one in the north-eastern corner of the enclosure, the other reaching eastward from the building numbered 292, under the threshold of which, last season, the bronze head of Augustus was discovered. A third mound, less conspicuous as to its height, lying westward from the palace No. 295, seemed, from the surface indications before excavation, to contain a building of special character.

The plan of the north-eastern corner is, at its present stage, somewhat complex. The main wall has been traced almost continuously, except at one place where one of the latest buildings passes beyond and over it. It is just possible that at this point there was a gateway, but the question will be rapidly solved with the progress of our excavation. There is, at any rate, an external tower which, combined with a break in the wall, leaves room for this possibility. In the northern wall, towards this corner, there are two special features; the one a flight of steps which originally must have led up to the ramparts, and the other a postern which is well defined and protected on the inside with a guard chamber. In the exact corner the ashlar wall is seen to be double, and externally the corner is strengthened by a quadrangular turret. With regard to other buildings, without entering into details in this brief report, those walls which are of good strength, and clearly arranged in due reference to the enclosing walls, (Block 297), alone may be looked on as original; while those along the eastern side which are placed at various angles to the main axis (Block 197), are clearly super-

posed upon an original plan. Hereabouts, just outside the main wall (in the spot marked 289), there was found a remarkable deposit of broken Meroitic pottery vases, decorated with paintings and stamped patterns.

Roman Bath

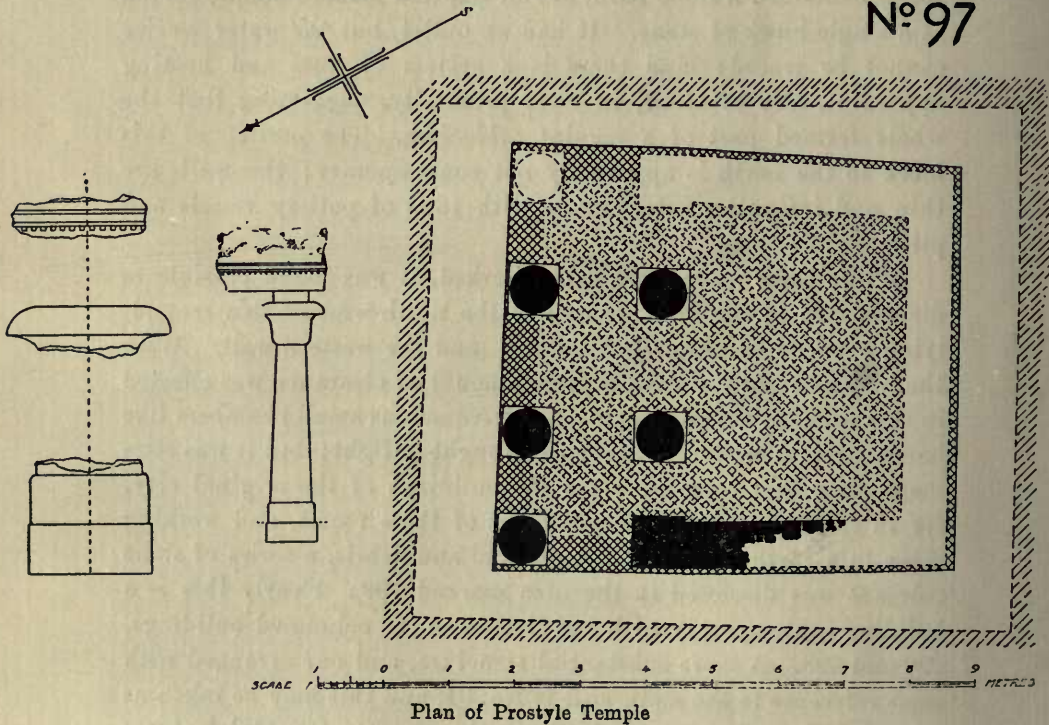
The surface of the mound numbered 98 has not been so completely cleared, but the plan presents a more or less connected appearance. There is, however, the same difficult problem of relative date to be disentangled, for the walls have all much the same appearance, though some of them represent a reconstruction of the main building apparently while the latter stood. One set of rooms contained a stone bath, of full size and modern shape, carved in a single block of stone. It had an outlet, but the water service cannot be traced: and there is a system of flues and heating apparatus, also of stone, in close proximity, suggesting that the whole formed part of a regular *caldarium*. The portion of this block to the north is apparently not contemporary; the walls are thin and irregular, interspersed with rows of pottery vessels and pits.

While these spots were being worked, it was found possible to dispose men in the level ground to the north-west of this mound, lying between buildings 292 and 296 and the western wall. With the help of light railways, a great amount of clearance was effected in this area, as the plan will show. Numerous small chambers like barrack-rooms or store-rooms were brought to light; but it was soon made clear that these were not the buildings of the original city, for in examining the apparent floors of these rooms, and working down to a further metre, through sand and débris, a series of stone columns was disclosed in the area marked 199: clearly this is a building contemporary with and similar to the columned buildings, 296 and 298. A more substantial structure, and one arranged with some reference to the main wall is No. 91, and this may be taken as a type of Meroitic houses. It shows the common Oriental features of the courtyard and residential rooms within its enclosing wall. The block No. 198 contained a building of special character; to judge by what can be traced, it must have been provided with a colonnade which presumably enclosed it. Abutting on this at its

north end, a series of buildings (93) represents two periods superposed, and encloses a brick kiln which presumably belonged to the later of these. Just to the south of this, in the spot numbered 92, a flight of stone steps and well-built threshold clearly marked the entrance to a substantial structure of the original city.

Classical Temple

Further to the north, numbered 97, there was found a small prostyle temple, the plan of which is here reproduced. It seems to be fairly contemporary with other excavated buildings adjoining it, and some of those lying to the south; but it is clearly later than a well-built structure of red brick, the foundations of which still



enclose it. The walls of the temple-platform indeed were built of the bricks taken from these earlier walls, and handed across the conveniently narrow space intervening. The platform was enclosed in a single thickness of these red bricks but solidly padded with

'wasters,' that is, red bricks which had lost their shape, or otherwise defectively burnt in the kilns. Five bases of these columns, as may be seen from the photograph on Pl. X, remain in position, and a little investigation soon disclosed the foundations of one of the antae. The length of the structure in proportion to its breadth does not give sufficient space for *naos* or *pro-naos* on the strict classical model, and we may suspect that, in this case, for local reasons, the dividing wall was dispensed with, and these two features were combined in a single chamber open to the cooling breezes of the north. The form of the base, the entasis of the column, the upper part of the capital, and some fragments of the entablature, together with a few miscellaneous decorative mouldings, are preserved; and by comparison with an existing column in the 'Taharqa' Building, 296, lead to a restoration of the order something like that which we reproduce with the plan. At the time of writing, the fragments of pottery and other small objects which may enable us to distinguish the exact date of this building, are not available for study, but it may be observed that in the samples of pottery from other portions of the site which are accessible, Professor Bosanquet fails to recognise anything distinctively Roman, while some pieces are clearly of an earlier character, dating possibly from the second century B.C., and stamped with Graeco-Egyptian names.

Summarising the general results of this portion of the work, it may be said that four building periods may be recognised. The earliest and apparently original series of buildings were of stone, and their foundations, for the most part, are not reached at less than two metres below the surface. They were followed at a considerable interval by buildings of red brick, which were soon supplanted by buildings, the walls of which were only faced with red brick. Then a further considerable interval follows until the surface houses are reached with their walls of mud or mud-brick, sometimes based upon rough foundations of stone.

The Royal Baths

We now come to the last and most instructive discovery which we have made within the site, in that portion, between the Royal Palace, 295, and the city wall, to which the working numbers 195,

194, and 95 were assigned. The excavation of this low mound was taken in hand at the beginning of the season, but owing to the extreme tangle of the buildings within it, and the superposition of several periods, it was only during the last days of our stay that its full character and importance became clear. Working down through the superposed walls, we came upon the Royal Baths, and determined the original plan, as far as reproduced on Plate VII. Our excavation of this building is not yet completed; but several of the chief rooms have been uncovered, including a local form of *frigidarium*, in the large swimming-tank and shower-bath, marked B, and a *tepidarium* (T), with ornamental seats. Attached to the baths are a series of chambers, C and D. The areas E and F have only been superficially examined, but it may be presumed that the colonnade traced along the western side of the tank was continued round it, as suggested in our plan. The enclosing wall of the whole building is fairly well defined by its facing of red brick, and the painted design upon its stuccoed surface, but there are several details which still require illustration.

Two flights of steps lead down into the *tepidarium*. Its three seats are disposed around the quarter of a circle, and their arms are conventional griffins carved in stone. There was also found, fallen on to one of the stairs, a winged sphinx of stone, with the body of a lion and the head of a bird. The seats are of familiar rounded shape, built into the thin dividing wall which follows their curve. Several fallen capitals, and parts of engaged columns, stuccoed and painted, were found lying about in various places, but further details of its plan are still uncertain.

The swimming-bath, B, is in a more complete state; the tank is two metres deep, and a flight of steps leads down to the bottom on its eastern side. The water inlets on the southern side are preserved, and are six in number, without counting the open-mouthed lion-head at the corner. The water supply is found in an ingenious system of storage-aqueducts, coming from the south, lettered A. These were built of red brick with a cemented channel about 20 cms. in width, and 30 cms. in depth. They had practically no fall, until they approached the bath, where there was a gully or pipe provided with a stopper; so that the canals having been already filled, presumably from the well marked in the plan, the stoppers could be withdrawn simultaneously, and the water allowed

to flow in a continuous cascade from the many openings into the tank. On this side the aqueduct is divided into four channels, which are distinguished in the plan by figures. The portion A1 led round the building c, and fed the nearest inlets, as was demonstrated by experiment. The portion A2 passed through the middle wall of c by a pipe, presumably to feed the central part of the cascade; and the portion A3 returned round the other end of the building, and headed for the nearest pair of inlets on that side, being traced at one point as a brick pipe lined with iron. The fourth branch A4 was brought down as it neared the bath to a lower level, and fed the gargoyle in the corner. The other walls of the bath are not preserved, but there is a distinct suggestion that, at any rate, the opposite side was fed in similar fashion from the system of aqueducts marked GG, which have not as yet been completely traced. The exact significance of the well H has also not been ascertained.

The southern wall of the swimming-bath is so well preserved that its original decoration largely remains *in situ*. Between the water inlets there may be seen in the photograph, Plate VIII, a series of glazed tiles, medallions and other devices, the fore-parts of alternate lions and bulls sculptured in stone; and above them, on the plastered surface of the wall, are the traces of frescoes, among which two serpents and the legs of an elephant may still be recognised. There are also the pedestals of two or three statues standing along the wall, and the greater portion of a hound carved in stone. The head of the dog was recovered; and it was also found possible to restore the central statue, which proved to be the representation of a harpist; and to replace the head on the left-hand sculpture, the subject of which is a musician playing the pipes. In the well of the bath the figure of a third musician was found, a flute player, and also the portions of numerous other statues. These included a local VENUS, a reclining figure in the pose of the Vatican GOD-OF-THE-NILE, a seated figure, clad in robes, holding a scroll, and several others.

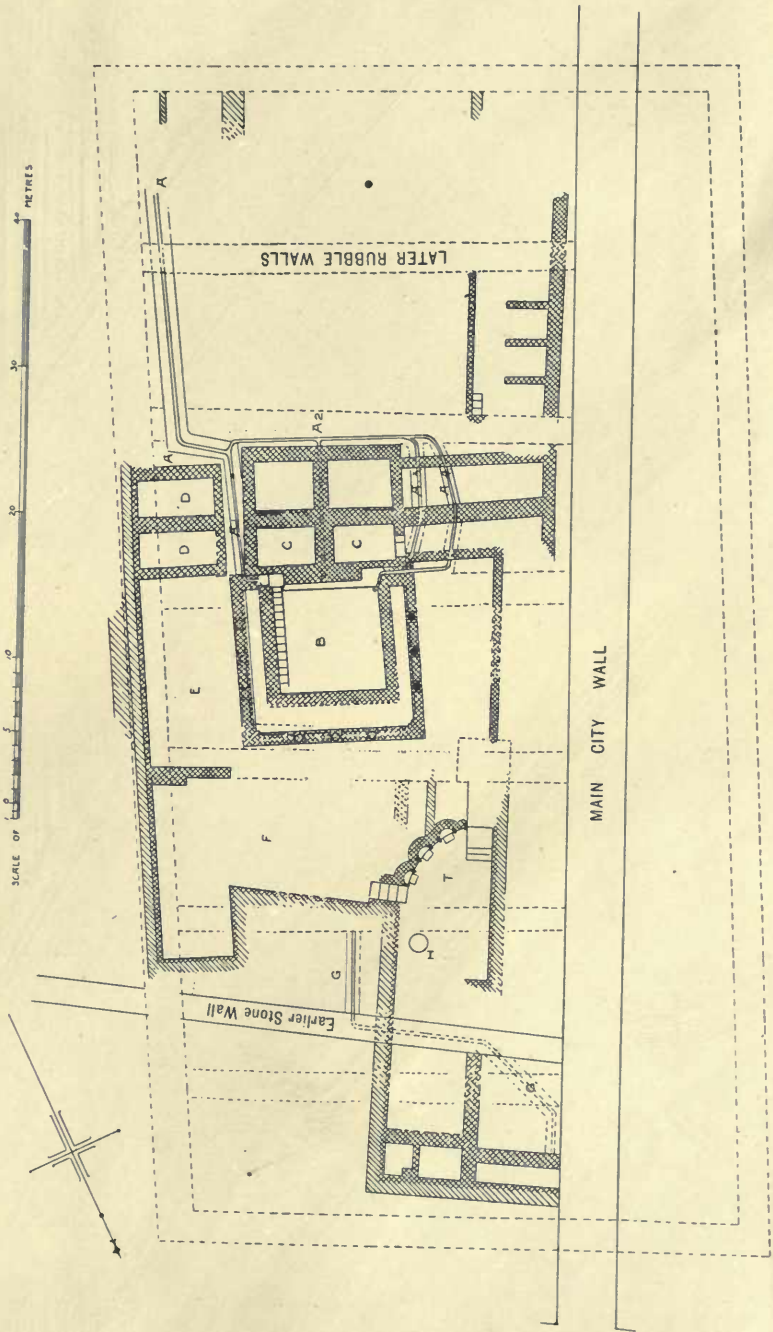
In other portions of the building considerable fragments of statues were freely brought to light, and doubtless the number will be added to as the excavation proceeds. Some of these are of distinct merit as artistic products. We must also mention two statues which were discovered in the last days of the previous season, in a small chamber (near to the well w), which had intruded

itself into the neighbouring corner of the palace enclosure, No. 295. These have been restored and placed in the museum at Khartoum. (See Plate IX.) They represent a man and woman; the latter may have been carrying a water pitcher on her head, and the man labouring at the well. That the woman really carried some object on her head is proved by the traces of an actual attachment for that purpose, but possibly it was for a smaller object, such as a lamp.

These Baths, with their decorative features, may be regarded as typically Meroitic. Nothing that had previously been found throws so much light upon the characteristics of the local arts of the period or periods they represent. The main structure of the bath we believe to be more or less contemporary with the adjoining palace, about the 2nd or 3rd century B.C.; but it was partly reconstructed, it would seem, about a century later. The sculptures seem to group themselves into these two periods; the one set, which is not numerous, of almost purely local conception, like the two figures last described; the other, which is the more common, derived from classical motives. These are clearly all of local execution, and in many cases somewhat crude. But there are some exceptions:—a few of these carvings, doubtless also local products, are full of vigour and character, and not without signs of form and grace; notably the head of a SATYR (or more strictly a SILENUS), the torso of a draped standing statue which is not here reproduced, and details in the execution of the flute player. The last-named is, unhappily, so much broken that a photograph hardly conveys a faithful impression of its quality. The torso of a male figure clad in a tunic and holding his robe over his left arm, recalls strongly the Vatican AUGUSTUS, and suggests a still later period for some, at least, of these sculptures.

The main building which we last described had been very much confused and disturbed by another of rough stone and rubble, which lay across it. This is shown in the plan (Plate VII) by dotted lines, but in the general plan on Plate VI its character may be better seen. It suggests a series of barrack-rooms, hastily built. There was also one wall of good stone work later than the baths in date, and extending from the main wall of the city towards the palace, 295; it has still to be traced further. The walls of the baths present several different features, doubtless accounted for by periods of restoration. Those which we are inclined to think the earliest are

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MEROË: PLAN OF THE ROYAL BATHS, 1912.

MEROË: THE ROYAL BATHS.

2
86



THE *TEPIDARIUM*, SHOWING THE SEATS.



THE SWIMMING AND SHOWER-BATH.

MEROË: STATUES FROM THE BATHS.

76



TWO FIGURES FROM A CORNER OF PALACE 295.



A MEROITIC VENUS.

MEROË CLASSICAL REMAINS, &c.

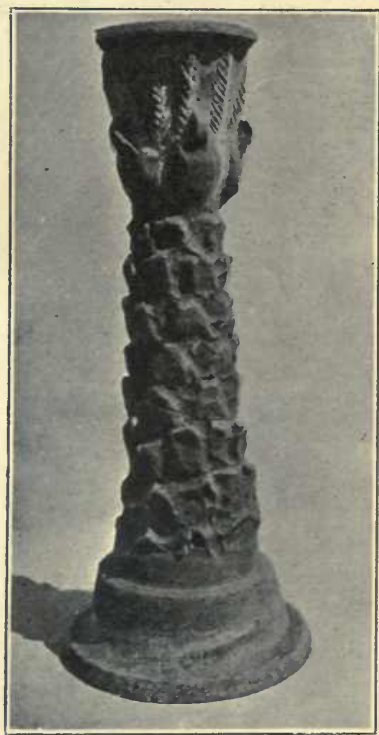
86



VIEW OF THE SMALL PROSTYLE TEMPLE.



TORSO, PRESUMABLY OF AUGUSTUS.



VASE-STAND OF POTTERY,
DESIGNED LIKE A PALM TREE.

built of small slabs of stone like the foundations of the adjoining palaces, while the later and more prominent walls are those built of solid red brick, and those with red brick facings but mud brick core. A third distinct period is represented, built in brick above these, but it is not important at the present moment to describe its remains, and we have omitted these from the present plan to avoid further complication. The last period, that of the rubble-stone walls, clearly belonged to a time when the city wall was already in ruins, for they may be seen stretching out over and beyond the old city boundary.

General Conclusions

Looking broadly at the results obtained during these three seasons of excavation, it now becomes clear that there are three main periods represented in the buildings which have been excavated, each one probably to be in its turn subdivided as work proceeds. The first is that of the original conception of the Royal City in the 7th or 8th century B.C.—the age of Aspelut, Hor-matileq and Mal-neqen. To this date belong the great buildings in stone,—the walls of the city, the original portions of the Royal Palace, 294, and of the audience chamber 292, the so-called Taharqa building, 296, and the low-lying columns found this year in Block 199. The early wall below the baths, mentioned above, must also belong to this time. Alike from actual evidence, as from type of structure, the Sun-Temple must be assigned to this date, for in its courtyard was a broken inscription of Aspelut. To this period also belongs the earliest building in the Temple of Isis with its giant statues, and probably the building of the Lion Temple and the small shrine (No. 70) adjoining it. In this age, Egyptian motives in art and probably in culture were still predominant. The next period is distinguished by the supplanting, about the third century B.C., of Egyptian ideas by Greek; as witness a small cameo of galloping horses found last year and the semi-classical statues just described. In construction, solid stonework has given way to foundations of stone slabs and walls faced, at any rate, with red brick. The buildings of this age must include the Baths, the later Temple of Isis, and probably the small classical temple. The Temple of Amon we presume to have been built earlier, but to have been now reconstructed. The facts connected with the rise of this period

seem to accord well with the tradition of Ergamenes given by Diodorus. There arose upon this basis, as a second phase of its middle period, the great days of Meroë, associated in tradition with the Queens Candace, lasting till the first century A.D. To this time belong nearly all the distinctive objects of pure Meroitic origin, such as the fine painted and stamped pottery, the glass and decorated tiles and so forth. The third phase is one of decadence, and, so far as it can be recognised at present, seems to be distinguished rather by Roman than by Greek ideas in art, but the buildings of the time are comparatively crude and lack distinction. In the middle of the fourth century A.D., however, the city still maintained its importance; and it was deemed the worthy objective of a military expedition as late as the seventh century; so that further examination has much to disclose as to the character of Meroë in its later history.

Chronological Summary

Summarizing these tentative conclusions we have, in the now familiar terms:—

Early
Meroitic
B.C. 700—300.

- I. The Royal City (290): Stone walls, Foundations of Palace 294, of audience chamber 292; of the 'Taharqa' building 296; and the low-lying columns, 199.
The Sun Temple; Lion Temple and Shrine (70).
Original temple of Isis, with giant statue columns.
[Characterized by ashlar masonry; tombs of early iron age; red and black wares in pottery, plain. Meroitic hieroglyphic inscriptions.]
- II. Temple of Amon (possibly enlargement and partial reconstruction).
Palace partly underlying 295.
Some chambers reused later in the Royal Baths.
Some isolated foundations.
[Characterized by stone-slab foundations, carried up in brick; Tombs of developed iron age; tendency to decoration on red and black pottery wares, by white lines or incisions. Meroitic cursive inscriptions.]

Middle
Meroitic
B.C. 300—
100 A.D.

- I. Royal Palaces 294, 295. Royal Baths 194, etc.,
(*Temp. Ergamenes.*) Audience chamber 292.
Pottery and Brick
Kilns.
[Characterized in construction by red brick
walls; in art by introduction of Greek
motives; the beginnings of thin decorated
wares in pottery; Meroitic Inscriptions.]
- II. Classical temple, reconstruction in baths and
over the temple of Isis. Partial recon-
struction in palace 295. [Period of quasi-
classical statues. Full development of
Meroitic pottery wares, faiënce and glass.]
- III. Head of Augustus, Torso of Augustus, Roman
baths, Palace 750. Graeco-Roman
inscription.

Late
Meroitic
A.D. 200—700.

- I. { Characteristics not clear; Roman influence
presumed.
Invasion of Axumites, about A.D. 340.
- II. Destruction of Meroë, about A.D. 700.

THE LINEN GIRDLE OF RAMESES III

By THOROLD D. LEE, B.Sc.

Among the objects comprising the collection bequeathed by Mr. Joseph Mayer to the Liverpool Museum in 1867, was an ancient Egyptian girdle (Inv. 11,156), which has been on exhibition ever since: it appears, hitherto, to have escaped the attention it deserves, both from Egyptologists and those interested in the history and development of the art of weaving.

In the Autumn of 1911, Professor Newberry, who was at the time re-arranging the collection of Egyptian antiquities in the Museum, noticed that this girdle was of exceptional interest and importance on account of the fact that a pattern was woven into it, and that it bore the name of Rameses III written upon it. The oldest known examples of fabrics bearing a woven design are the fragments of tapestry that were discovered in the tomb of Thothmes IV at Thetus, and date from about 1500 B.C.; and the next most ancient examples, hitherto known to exist, were found in the Crimea, and date from about 400 B.C. The girdle that is the subject of this paper dates from about 1200 B.C., and would, therefore, be of exceptional interest even if it were only a figured tapestry, as are the specimens referred to above. It is, however, of a much more complicated structure, and shows, indisputably, that even at that early date the Egyptian weavers were possessed of a very considerable skill in the technique of their art, and built and used looms that were much more complicated than has hitherto been believed to be the case.

The girdle measures 17 feet in length over all, and in width tapers evenly from 5 inches at the wider to $1\frac{7}{8}$ inches at the narrower end. It is woven with the warp, or longitudinal threads, running along its length, the selvages forming the upper and lower edges. In order to prevent the ends from fraying out, the wider is bound with a braid, made of the same thread as is used in the cloth itself, formed into a loop at each corner, while at the narrower end the warp threads are plaited together in a cord or fastening.

The material of which it is composed is linen, and the object in adopting the method of weaving that has been used, has clearly been to make the cloth as firm and, at the same time, as pliable as possible. The result has amply justified the complicated nature of the weave, for the girdle feels compact and unlikely to work into a rope when worn, while its smoothness and pliability to the touch remind one of a snake's skin. The number of colours used is five, blue, red, yellow, green, and the natural shade of the undyed linen, and, although in places they have faded almost to the point of being indistinguishable from one another, yet, on the whole, they appear to have stood the test of time very well. The green colour is only used in one or two places, and there, only in small spots, so that it is not noticed until the girdle is closely examined.

The illustration shows the nature and arrangement of the pattern. The white stripe down the centre, which is $1\frac{1}{8}$ inches wide at the wide end of the girdle, is completely eliminated at the narrower end. About 12 inches from the wide end, the cartouche of Rameses III has been written in a black or dark brown ink on the girdle, in the middle of the white stripe. The ink used, appears to have damaged the linen, and this accounts for the fact that there is a hole in the girdle at this point, but, fortunately, the damage has not entirely obliterated the cartouche, which is still decipherable.

The condition of the girdle is remarkably good for, with the exception of the hole mentioned above, and one or two cracks and places where the edge is ragged, it is a perfect specimen.

The thread of which it is composed is threefold,* and the same thickness appears to have been used for warp and weft. A careful computation of its thickness, calculated from the weight of the girdle (about $11\frac{1}{2}$ oz.) and the length of thread required to make it, gave a count of threefold 105 lea, linen scale. It is very evenly spun, and still has a considerable amount of strength in spite of its great age. For the benefit of those not acquainted with the linen scale, it may be said that one pound weight of single 105 lea

* A threefold thread is one that is composed of three fine threads twisted together just as a rope is composed of several strands. The first process in its manufacture is the spinning of the fine single thread, three threads of which are then 'doubled' up, to form the threefold thread.

thread contains a length of about 18 miles, the 'threefold' being about the thickness of fine sewing cotton.

The girdle, as has been stated above, has been woven with the warp threads running along its length, while the weft threads, those that are carried by the shuttle, pass across it from side to side. The warp threads have been dyed to the various colours that compose the pattern, and lie so closely beside one another as to cover the weft threads completely. These latter are of undyed yarn, and count on the face about $30\frac{1}{2}$ to 1 inch. As the cloth is a double one, a different set of weft threads weaves the back from those used for the face, so that we have about 61 threads of weft to the inch in the complete cloth. The warp threads count about 68 to the inch on the face, and as there are two different qualities or weaves of cloth in the girdle, as will be explained later, one of which requires four threads, and the other five, for each thread shown on the face, we find there must be no fewer than 272 threads of warp to 1 inch, in some parts, and as many as 340, in other parts. It is to the great quantity of yarn that is used to make it, that the cloth owes its firmness, while the method of arrangement of the threads accounts for the fact that it is so wonderfully pliable.

Much as the interest of this remarkable specimen may appeal to the general observer, it is not until we come to examine its structure that we discover the most remarkable points about it, for by doing so, we are able to deduce the method of its weaving, the really complicated form of loom used, and the great ingenuity displayed by the weaver in obtaining his pattern.

The structure or design* of a cloth is not an easy matter to explain to a person unacquainted with such matters, the usual terms and diagrams being almost incomprehensible to the uninitiated, but in the present instance, the design, or rather designs, are so ingenious that it may be worth while describing them in a somewhat more elementary manner than would be necessary to explain them to a weaver, in order to enable the non-technical reader to understand them, should he wish to do so.

In weaving such a cloth as the one we are considering, the warp threads, all being laid parallel with one another, are stretched on

* NOTE.—Throughout this paper the term 'design' is used to refer to the plan or arrangement of threads composing the cloth irrespective of their colour, and by the term 'pattern' is implied the zig-zags, stripes, etc.

the loom, being wrapped round a roller at each end or secured in some other way. The weaver first draws a certain number of them forward, and then passes the weft thread across, between the warp threads that he has drawn forward and those left lying behind them. Let us suppose that all the warp threads are numbered consecutively, starting from number one at one side of the loom, and that to begin with, all the odd numbered threads are drawn forward and a thread of weft is woven in, then all the even threads are drawn forward and another thread is woven in, and this process is repeated again and again, first the odd and then the even threads being drawn forward. The cloth that will be woven will be of the simplest design that can be imagined, being the same as plain calico, or plain tapestry cloth.

If, after having woven some of the cloth, we were to dissect it by cutting it up along the line of the warp, the section showing the odd warp threads would be as follows—the dots representing the section of the weft threads—



FIG. 1.

and the even warp threads would appear thus—



FIG. 2.

while a diagram of this kind

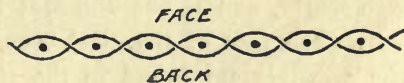


FIG. 3.

would represent the complete cloth, and would show that it was woven on a design that required two warp threads, and two threads of weft, to complete it.

Now it was found by examining the plain white stripe up the centre of the girdle, at a place where it was torn, that the arrangement of the warp threads was as follows, though of course the

diagram shows the effect very much enlarged, the actual size of the section shown in the diagram, covering in the cloth only one-third of an inch.

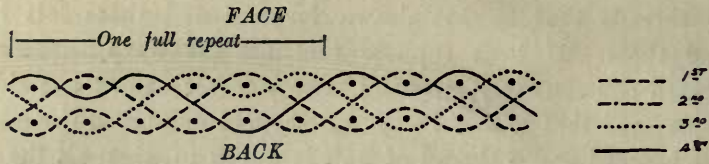


FIG. 4.

It will be noticed that four warp threads are required to make this design, and they have been indicated differently, in order to show the order in which they occur. It will also be noticed that this design shows a double cloth, one set of weft threads being used to make the back and another set being used for the face of the cloth, and that the design repeats on twelve threads of weft, six back, and six face ones.

If, in the cloth, all the warp threads were of the same colour, and were so close to one another as to hide the weft entirely, the effect would be a plain cloth of uniform colour, and this is what we see in the white stripe down the centre of the girdle, as well as in the plain blue and plain red stripes that lie next to it on either side.

Among the different patterns to be found on the girdle it will be seen that there are a number of stripes, consisting of spots of various colours. There are eight of these in all, four in each border, six of them being the same on one side of the cloth, reading white, red, white, blue, white, blue, this pattern repeating again and again. Now it will be seen that if the 1st and 4th warp threads in the diagram were white, and if the 2nd was red, and the 3rd was blue, the effect on the face of the cloth would be a series of spots in exactly the arrangement found in the stripe referred to. If, however, we examine the effect of such an arrangement of colours on the back of the cloth, we shall find that the pattern is not the same, as it will read, white, blue, white, red, white, red, having two spots of red and one of blue, to the two blue and one red on the face.

An examination of the cloth showed that this was actually the pattern given by five of these stripes on the back, but the sixth

stripe, one of those on the outside edges of the borders, gave exactly the same design on the back as on the face. The other two spot stripes read thus, yellow, green, yellow, blue, blue, blue, being the same on both back and face, and it will be seen that it is impossible to get this pattern by any arrangement of the colours of the threads, if woven on the design given above.

It will therefore be seen that the design with which the white centre stripe was woven could have been used to weave the two inner spot stripes and three of the outer ones, and an examination of a place where it was possible to see the arrangement of the threads on one of the stripes proved that this was the case, so that after the weaver had once arranged his warp threads so that, of each set of four, the first and fourth were white, the second was red, and the third was blue, all he would have to do would be to weave along on the same design as given above, and spot stripe would be produced; while, where all the threads were white, red, or blue, a plain coloured cloth in white, red or blue would result.

An examination of the texture of the girdle shows that the centre section out to the inner spot stripes, and one of the outer edges, is thinner than the rest of it, this thicker part being uneven, having distinctly marked ridges running across it as though every fifth and sixth threads of weft were thicker than the others. Most fortunately a portion of the edge of the girdle, at which this unevenness occurred, was damaged so that it was possible to find out the design of this uneven part. The design may be represented as follows:—

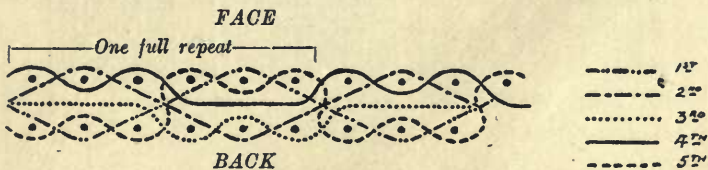


FIG. 5.

It will be seen at once that whereas this design resembles the former one in that it repeats on twelve threads of weft, six face and six back, yet it requires five threads of warp instead of four. If the first spot stripe is again considered it will be seen that we can obtain it by the use of this design if the first, third, and fourth threads are white, the second is red, and the fifth is blue, and it

will be noticed that with such an arrangement the back and face will both give the same pattern.

It will also be seen that the spot stripe, yellow, green, yellow, blue, blue, blue, which could not be obtained with the other design, can be obtained with this, and also gives the same pattern on the back of the cloth, this being the case in the girdle.

We now come to the examination of the other patterns, of which there are two, and as a moment's consideration will enable one to see that if one of these can be woven by this design, the other can also, it will only be necessary to explain one.

Taking the zig-zag pattern, it will be seen that it consists actually of only three different spot stripes arranged below one another so as to give the effect required. Of these, two are really the same as the two that we have considered so far as arrangement goes, marked Z and Y, though the actual colours used may be different, and the third one, marked X, reading blue, white, blue, blue, blue, blue, can be obtained by having the second thread of each five, white, and the rest blue.

The diagram shows the zig-zag pattern. The letters show how each section or step may be read as a spot stripe, and the table shows the colours of warp threads that must be used for each of the group of five, required to complete the design of the cloth.

Table of arrangement
of Warp threads

One repeat																					
															1"	2"	3"	4"	5"		
X										B	W	B	B	B	B	X	B	W	B	B	B
Y										W	R	W	B	B	B	Y	B	R	W	W	B
Z										R	W	R	W	B	W	Z	B	W	R	R	W
Z										W	B	W	R	W	R	Z	W	B	W	W	R
Y										B	B	B	W	R	W	Y	R	B	B	B	W
X										B	B	B	B	W	B	X	W	B	B	B	B

= BLUE

= RED

FIG. 6.

It will therefore be seen that this zig-zag pattern can be woven just as simply as the spot stripes first considered, so that when the weaver had once fixed up his loom he had no further need to pay any attention to the pattern, which came up automatically, and it can easily be seen that the other pattern can be accounted for in the same way. This design on five warp threads is therefore proved as being the one required to weave the parts of the girdle that could not be woven by the design on four warp threads, and anyone

with any knowledge of weaving will at once see that the five-warp-thread design will cause the ridges referred to above, on account of the uneven way in which the double cloth formed by it, is bound together.

With reference to the back of the cloth, the following diagram shows the effect that would be obtained on the reverse side, by the same arrangement of the warp threads as used for the face in the table above.

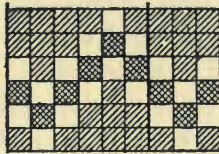


FIG. 7.

This diagram represents the back of the cloth as it would look if it could be viewed through from the face, and it will be seen that the pattern is all moved along three weft threads, so that the 'Zig' appears at the back underneath the spot where the 'Zag' is, on the face, and this corresponds with arrangement of the design as found on the cloth itself.

We have now proved the designs in which the girdle is woven, and seen how, by a complicated draft, or arrangement, of the various coloured threads, the different patterns were all produced automatically as long as the weaver continued to weave the cloth according to the two designs that we have seen were used. The drafting of the warp for such a pattern as this will readily be understood to have been a matter requiring the greatest patience and accuracy, when it is remembered that there were about 340 threads to the inch in some parts, but even after the warp was set up in the right order, the weaving of it would be a matter of very considerable difficulty, and one calling into play all the skill of the weaver.

In the weaving of the simplest form of cloth as referred to above, we have seen that the weaver draws forward the alternate warp threads before passing the weft through. In the most primitive form of loom this is done by hand, each thread being picked out and drawn forward separately, or the needle, or shuttle, carrying

the weft is threaded up and down across the warp exactly as in darning.

It will be readily seen that if there are a large number of warp threads, the speed of weaving will be very slow indeed if each one has to be picked out by hand, so that an arrangement of what are known as lisse threads was adopted at a very early date, being shown in use in a picture of an Egyptian loom dating back to about 3000 B.C. These lisse threads consist of a large number of short threads of even length, having a loop at one end, and being attached at the other end to a bar of wood or a string stretched across the loom. To set up a loom to weave plain cloth, two sets of lisse threads might be used. The even warp threads would be threaded through the loops in one set while the odd warp threads would be threaded through the loops in the other set. All that would now be required to prepare for the passage of the weft would be to pull forward one of the sets of lisse threads which would draw forward all the odd or even warp threads as the case might be. After the weft thread had been put in, the set of lisses that had been pulled forward would be allowed to fall back and the other set would be drawn forward to prepare for another thread of weft.

As the design of a plain cloth such as we have been considering repeats on two warp threads, only two sets of lisse threads are required to weave it, but in the case of the girdle part of it is woven with a design that repeats on four warp threads and part with a design that repeats on five, so that, as the whole nine work quite independently of one another, nine sets of lisse threads, at the least, will be required to weave this cloth.

It is hardly conceivable that in weaving this girdle the various warp threads were picked out and drawn forward by hand before each thread of weft was put in, for owing to there being as many as 340 of them to the inch in some places, many of them would be completely hidden and buried among the others, and to pick out the right one would be a matter of the very greatest difficulty such as would baffle the most painstaking and patient of mankind.

Knowing that the use of lisse threads was understood at the time that this girdle was woven, and appreciating the practically insuperable difficulties in the way of picking out the design by hand, we should be justified in assuming that lisse threads were

used, even if there was no direct evidence to prove the assumption. There is, however, very conclusive evidence, in the nature of the faults that occur in the girdle, which are such as would be made by pulling forward sets of lisse threads out of their turn, for the faults repeat the whole way across the cloth.

There is one fault in the weaving that is of very particular interest, and which may best be illustrated by the way in which it effects the zig-zag pattern. On one side of the cloth it is not visible, but on the other side the zig-zag pattern appears thus:—

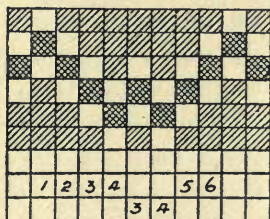


FIG. 8.

If the girdle had been woven by two weavers, one sitting at the back and the other at the front of the loom, this fault would have been detected at once; but if only one man had been weaving it he would not have noticed the fault if it occurred on the back because there is no sign of it on the face.

While it would be practically impossible to weave such a cloth as this without the use of lisse threads, it would not be by any means a straightforward and easy matter working such a design as this with nine sets of lisse threads. Before the first thread of weft was put in, the weaver would have to draw forward the 1st and 6th sets and would have to hold them out while he put his weft across. Before the second thread of weft could be put in (the first back weft thread) he would have to draw forward the 1st, 2nd, 3rd, 6th, 7th, 8th, and 9th, next the 3rd, and 8th, and then 1st, 3rd, 4th, 5th, 6th, 7th, 8th, and so on, for the twelve different combinations required to complete the design.

It will be seen, therefore, that it would be a very easy matter to make a fault by drawing out the wrong set of lisse threads, or failing to draw out a set that should have been drawn forward for any particular thread of weft, and if such a mistake were made while weaving one of the threads of weft making the back, it would not

be noticeable from the front of the cloth. A careful examination of the girdle fails to reveal any such slips of an odd set of lisses, the faults referred to above being the result not of the failure to raise or leave a single set, but the use of one combination of lisses instead of another. In the fault illustrated, the weaver has repeated over again two of the combinations that he has just used, instead of going on to the next in order. He has, in fact, put in three back threads of weft one after the other, to one face thread, so that in the same space as is covered by six weft threads on the face we find eight at the back.

This interesting fault would suggest that some means was employed for working out the combinations automatically, so that all the weaver had to do was to pull forward, before putting in each thread of weft, that one, of twelve levers or strings, which was attached to the combination of sets of lisse threads required for the thread of weft that he was about to weave.

Such an arrangement as this would simplify the weaving enormously, and there seems every reason to believe that something of the sort was used, possibly the weaver did not actuate the twelve strings himself but had an assistant to do it for him, just as boys were used for the same purpose in old hand looms, being called draw-boys on account of their having to draw up the sets of healds as required.

It has already been said that the girdle tapers in width from one end to the other, and this has been effected by gradually cutting out some of the warp threads as the weaving proceeded and drawing the remaining threads closer together, so that the number of threads to the inch remained the same throughout. Where the design repeats on five warp threads, bunches of five have been removed at a time, and where it repeats on four, bunches of four have been taken, so that the design of the cloth has not been interfered with, but the pattern is gradually altered in size and shape, as may be seen by comparing the illustrations of the two ends of the girdle.

Even if this girdle represents the high water-mark of the weaving industry at the date at which it was woven, and although we know of no other examples of anywhere near the same date that approach it as examples of complicated weaving—for the earlier

specimens referred to are only hand tapestry and as such far simpler and more primitive examples of weavers' art—we cannot believe that all the ingenuity that has been expended upon it was the result of one man's work. Probably many of the features of this cloth that have been considered had been in use, possibly in a simpler form, for many centuries before this sample was woven, although we have no record of them.

The earliest example of weaving that has been found in Egypt dates back to the Archaic Period (about 3500 B.C.), and is only plain cloth such as was used for mummy wrappings, but an examination of it shows that all the thread used to make it is two-fold and that lisse threads were used to weave it.

There is another very interesting point that is raised by a consideration of this girdle which has been left to the last, not on account of its comparative importance but because the only evidence that throws any light on the point is of a circumstantial kind. The general impression that is gathered from a glance at the drawings of ancient Egyptian looms is that they were vertical; that is to say, the warp was stretched vertically, but since the Egyptian drawings represented objects as all being on the same plane, it will be understood that a weaver sitting beside a vertical loom would be represented in exactly the same way as a weaver sitting beside a horizontal loom, so that some of the drawings of looms that exist may represent horizontal looms, although at first sight they appear to be vertical.

Whether this girdle was woven on the former or latter variety is a matter that cannot be determined with certainty, but there are points that support the view that the loom was horizontal. The vertical loom has been found the best, on the whole, for hand tapestry weaving; whereas the horizontal is the only form that is used for modern power looms.

The modern form of lisse threads, called nowadays 'healds,' consists of two bars of wood with threads tied between them, in the middle of which there is a loop or eye through which the warp is threaded. The object of this is that the healds can be drawn backward as well as forward. In a cloth containing as many threads of warp to the inch as the girdle, it would be a matter of the greatest difficulty to draw forward exactly the threads that were required

without their bringing with them other threads with which they were entangled, unless these other threads were held down by healds such as have been described. In a horizontal loom the healds will hang vertically, and in many forms of looms a weight or spring is attached to the bottom bar of the heald to keep it taut and to draw it into place after it has been used. Such an arrangement would be very much more complicated to fit up on a vertical loom than on a horizontal, and apart from that difficulty, in a horizontal loom the threads would tend to fall back into place of themselves, which would not be the case in a vertical loom. Anyone who has a practical knowledge of weaving with a large number of warp threads to the inch will realize the great difficulty of getting the warp to split or 'shed,' cleanly for the passage of the weft, and—in view of the very accurate weaving of the girdle and the small number of faults due to imperfect shedding—will readily endorse the suggestion that the girdle was woven on a horizontal loom with nine leaves of healds at least, weighted if not worked positively, and raised by some arrangement analogous to the modern dobby in so far as it drew forward by one motion the various leaves of healds required for each pick of weft, the pegging plan or design of which would be as follows:—

PICKS OF WEFT.

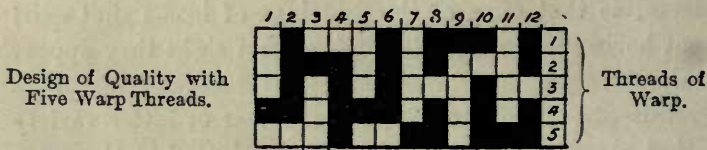


FIG. 9.

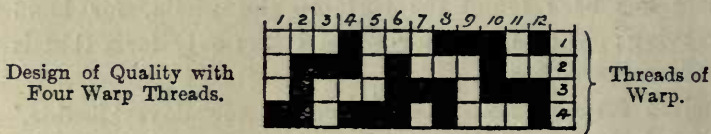
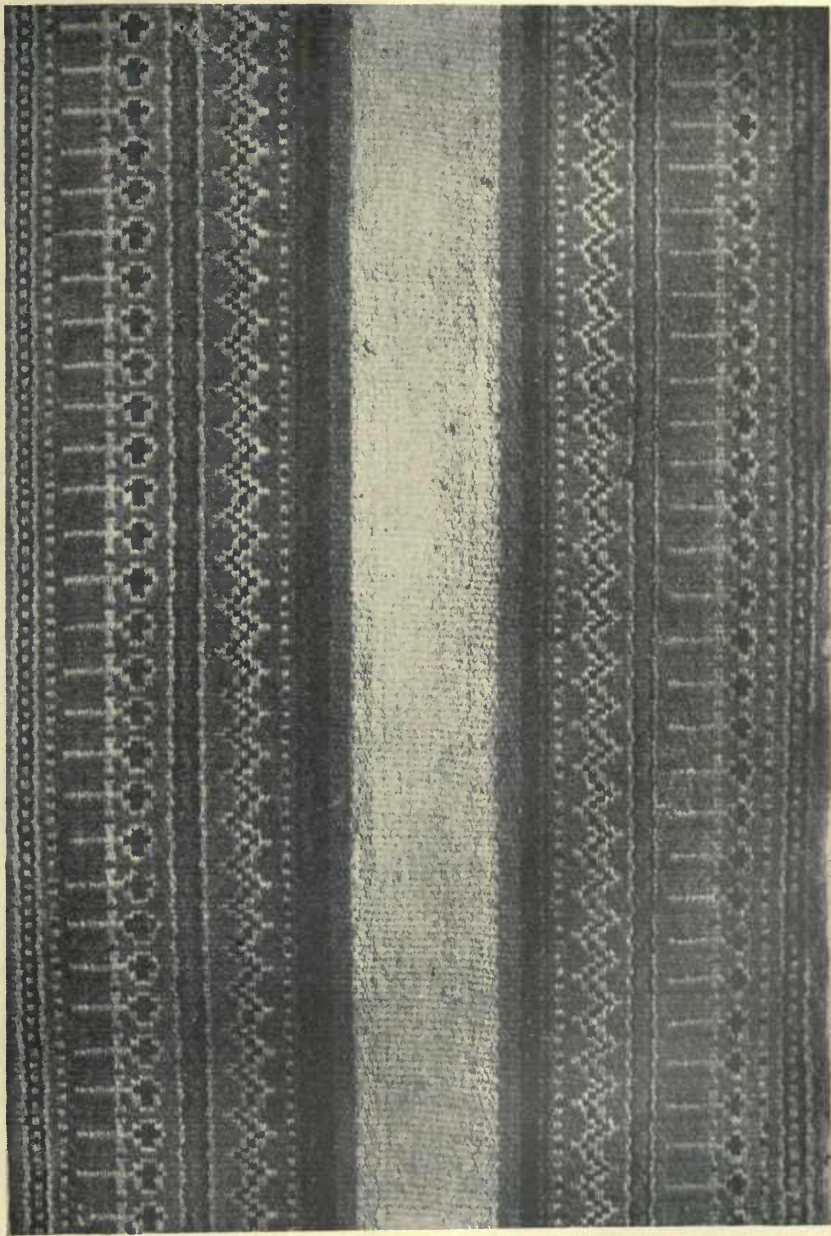
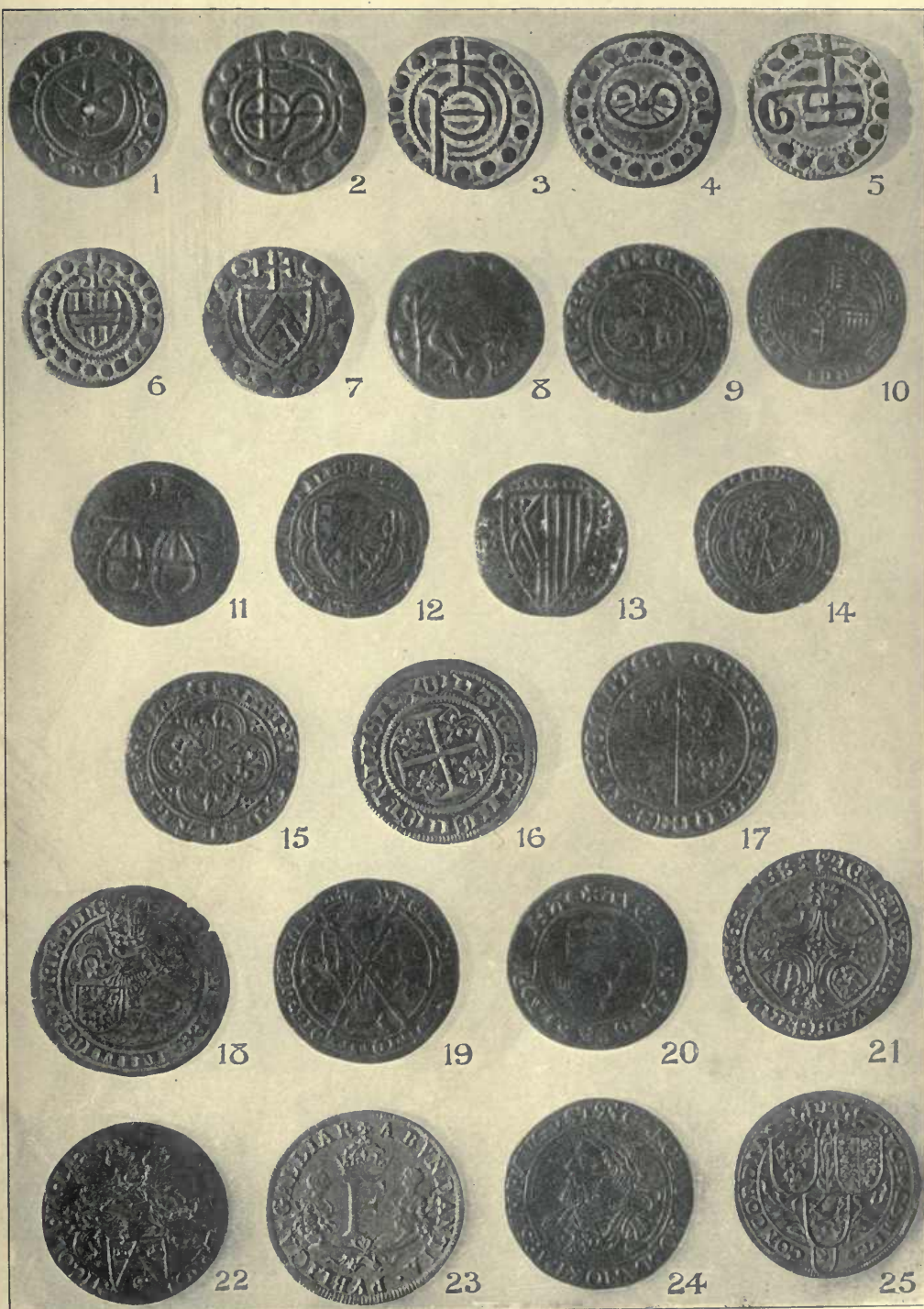


FIG. 10.

96



THE GIRDLE OF RAMSES III (Section actual size).



JETTONS OR CASTING COUNTERS.

1
1/2

ABYDOS: EGYPT. MINOAN VASE.



VASE OF CRETAN FABRIC FROM AN EGYPTIAN TOMB.

Height 13.50 cms. ; width 15 cms. ; projection of spout, 4 cms.

The body colour is dull black. The lines are yellowish-white; the spots are of the same colour, on an orange band. The rosette is yellow-white with orange centre: the stars are orange on white. The inside is of reddish tinge, with a grey-black band around.

Found in Tomb 416, Abydos, 1907, with the group shown on Pl. XIV.

SUPPLEMENTARY LIST OF JETTONS

BY PROFESSOR F. P. BARNARD

As only a few of the rare 13th and 14th century Jettons are included in the above collection at the Institute, I add here descriptions and illustrations of other early pieces, and of certain later examples of typical character or of special interest, taken from my own cabinets. All are of latten, bronze, or copper. The lettering down to No. XXI inclusive is Lombardic.

I.—Obverse of an English, or Anglo-French, 13th century Jetton.

The crescent and star was a badge of Richard I, John, and Henry III, and appears on the obverse of both seals of Richard I, in the field; on the obverse of the first seal of Henry III, at the beginning of the legend; and on the reverse of the Irish pence and halfpence of John, *e.g.*, Nos. 10 and 12 in the *British Museum Handbook*. Since the origin of this badge does not seem to have been investigated, I venture to submit the following suggestion as to how it came to be used by Plantagenet Kings of England. The crescent and star (or sun, whichever it was) appears on the *deniers* and *oboles* (pennies and halfpennies) of Raymond V, Count of Toulouse and and Marquis of Provence, 1148-94). (See *e.g.*, Engel and Serrure, *Numismatique du Moyen Age*, I, 780.) It is found also on the reverse of coins of Raymond II, Count of Tripoli, 1152-87, a member of the House of Toulouse. (*Ibid.*, 912.) Evidently it was a device of that family. The mother, and the paternal grandmother (*Geoffrey of Vigeois*, ed. by Labbe in *Nova Bibliotheca*, Paris, 1657, II, 304), of Queen Eleanor, mother of Richard I and John, were both of the House of Toulouse. Thus it is likely that the crescent and star descended to these kings through their mother. On many of the 13th century jettons of the English sterling type (such as Nos. 1 and 2 in the collection at the Institute) the cross on the reverse is cantoned by two crescents and two stars placed alternately. It is not necessary here to go behind the use

of this symbol as a Plantagenet badge, but it appears in the Roman coinage as the sun and moon on a reverse of Petronius Turpilianus (Smith, *Dict. Gk. & Rom. Biog.*, 1867, III, 1192), and became, of course, a familiar device of the Eastern Empire, whence the Ottoman Turks presumably adopted it. (Didron, *Christian Iconography*, Stokes, I, 159.) See the seal (in Piton, I, 77) of one of the Lombard bankers settled at Constantinople in 1249. There is no legend on either face of this piece. The reverse bears a long cross patty, similar to that on Edward I's Anglo-Gallic penny (*B.M. Handbook*, Nos. 243, 245), cantoned by crosses within circles, which is somewhat reminiscent of the Pax money of William I. The obverse of this jetton is described and illustrated in Rouyer and Hucher, p. 171 and Plate XVI, figs. 134-5; and in La Tour, Nos. 662-6. [Pl. III, 1.]

II.—Jetton of Lombard bankers, such as succeeded the Jews after their expulsion from England in 1290. Both faces are the same, and are mute. The type is the orb, or mound, surmounted by the cross, combined in monogram with a Lombardic *m* (?) and *s* (?) as initials. If these are the letters, they may stand for Bonaventura de Marceio of Siena. (See Piton, II, p. 10.) The cross and initials is a common form of device on the Lombard counters, and may be compared with our merchants' marks. The bezanty border is one of the features of this class of jetton. As this fine piece (together with Nos. III, IV, V, VI, and others) was bought by me at the sale of the Kinberg collection at Amsterdam on July 1st, 1910, it probably was never used in England and may very well be anterior in date to 1290, but is of that century. Jettons of this character are of Italian manufacture. [Pl. III, 2.]

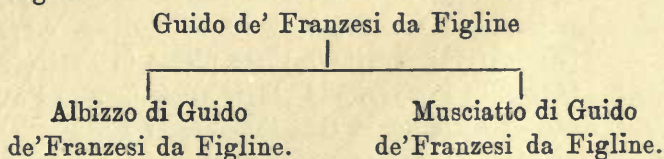
III.—Obverse of a Lombard Jetton of the same class as No. II, bearing a *p* surmounted by a cross. On the reverse is the mound with its cross, which is carried down throughout the mound, and in each of the angles thus formed is a pellet. It is mute on both faces. The same obverse appears with different reverses in Piton (Nos. 113-4), and

with yet another reverse, the shield of the Strozzi (?) family of Florence, in La Tour (No. 707). The reverse of this piece occurs on another counter of the same series, given in Piton (No. 139). [Pl. III, 3.]

IV.—Reverse of a Lombard jetton of the same series as No. II and III. The pack, or bundle, is a common and natural type on these pieces, and is found also on leaden merchants' seals. The obverse bears the device of the Albizzi family, two concentric circles surmounted by a cross. Both sides are mute. This counter is given in Piton (No. 180). [Pl. III, 4.]

V.—Reverse of a Lombard jetton of the same series as Nos. II, III, and IV. The initials are T.S. A fleur-de-lys on the obverse shows that the issuer was a Florentine; *cp.* Piton, No. 146, reverse. Both faces of the coin are mute. [Pl. III, 5.]

VI.—Obverse of a Lombard jetton of the same series as Nos. II to V. The shield is that of the Franzesi family (*paly of six gules and argent, a fess or*) borne by the famous Italian financiers known in France as Biche and Mouche. Piton (II, pp. 100-1) gives cuts of their seals: these display the above arms with the respective legends S[IGILLUM] BICHI [FILII] GUIDONIS DE FIGLINO, and S[IGILLUM] MUSCIATI [FILII] GUIDONIS DE FIGLINO. Figlinum is Figline, to the south-east of Florence. This helps towards the following pedigree:—



There was a third son Nicolo. For an account of transactions of this house consult Piton, I, 102-114; and for a notice of the negotiations for an alliance against England conducted in 1297 by these two brothers, see *Trans. Ryl. Hist. Soc.*, N.S., XVII, 178. This obverse is that of Piton's No. 72; *cp.* also his Nos. 73-5. The reverse is similar to that of No. III, but has no pellets.

None of the examples given by Piton have this reverse.
Both faces are mute. [Pl. III, 6.]

VII.—Lombard Jetton of the same series as the preceding five.
Both faces are the same, and are mute. Unknown to Piton, Feuardent, and La Tour. [Pl. III, 7.]

VIII.—Obverse of a Lombard Jetton bearing Androcles and the Lion, a favourite type with this class of counter. On the reverse is an equilateral triangle, base uppermost, surmounted by a cross which penetrates to the centre of the triangle where it ends in a mullet or pierced star. This piece is Feuardent's No. 4975 and Piton's No. 145. Among other reverses or obverses with which the Androcles type is found associated are the fleur-de-lys of Florence (Piton, No. 146; Feuardent, No. 4976); the Lion of St. Mark of Venice (Piton, Nos. 141, 147-152; La Tour, Nos. 719, 723; Feuardent, Nos. 4977-8; Fontenay, p. 57; Rouyer and Hucher, p. 175); St. George of Genoa (Piton, No. 142); the *r* of Pisa (La Tour, No. 711); the double *s* of Siena (?) (Piton, No. 143); and the arm holding a croiser, of the Chartreuse at Pontignano (Piton, No. 153). [Pl. III, 8.]

IX.—Obverse of a Jetton with the type of a bear tied to a tree, Feuardent's No. 11041. The legend is *Cest la malle best*. The reverse has the decorated cross within a quatrefoil (familiar on counters of the period), in the spandrels of which are the letters A.V.E.M. for *Ave Maria*. Its date is late 14th century. Some authorities, *e.g.*, Dugniolle (Nos. 27-33), attribute these pieces to Bruges; Feuardent (II, 459), Rouyer, and others allot them to France. There can be little doubt that they are of French, not Flemish, make. Feuardent goes further, and regards them as jettons, or *méreaux*, of the Abbey of Ourscamp in Languedoc, on the ground that the arms of that house display a similar bear. *Cp.* La Tour, Nos. 1358-68. [Pl. III, 9.]

X.—Obverse of a Jetton of the *Trésor Royal* of France, struck in the second half of the 14th century, displaying four keys in cross. In the 13th and 14th centuries, keys were the

special badge of the French Treasury counters, and survived on the buttons of liveried officials of that department down to the French Revolution. (*Cp.* the keys on the English Exchequer Seal, given in *Archaeologia*, VIII, Pl. XXX, fig. 3.) The legend is GETTES SEUREMENT followed by a dragon, another symbol of guard and security, often found on the locks of coffer in the Middle Ages. The reverse type is the arms of France-ancient on a lozenge set within a quatrefoil, and the legend, LE COMPTE TROUVERES, is a continuation of that on the obverse. This piece, which is Feuardent's No. 1849, is of graceful design and delicate workmanship. It is described and illustrated by Rouyer and Hucher, p. 61, Pl. IV, fig. 30; and La Tour, No. 72, Pl. III, fig. 5. [Pl. III, 10.]

XI.—Reverse of a 13th century Jetton of the *Chambre des Monnaies* of France. The scales are symbolic of monetary affairs, the pellets perhaps of coins or of counters. Both faces are mute. The reverse bears the shield of France-modern surrounded by pellets (Feuardent, No. 2114; Rouyer and Hucher, 52, Pl. III, fig. 21). I have used throughout these lists the conventional term France-modern, but this piece is itself one of many proofs that the three fleurs-de-lys are found in France long before 1364, while France-ancient, in which the field is semy of lys, occurs long after that date, *e.g.*, on 15th century jettons. Among artists, at any rate, there was no rule, and even on Edward III's gold money we find both arrangements. Variants of this jetton have France-ancient. [Pl. III, 11.]

XII.—Obverse of a Jetton, probably of the wife of Philip, Count of Evreux, and, *jure uxoris*, King of Navarre (*d.* 1343), bearing the arms of Evreux and Navarre dimidiated. The legend reads PATER NOSTER QUI ES IN C, and the reverse legend is the same less the final c. On French jettons dimidiation generally indicates the counter of a lady. The type of the reverse is a cross fleurdelysée with bowed limbs, its voided centre enclosing a fleur-de-lys, a form which is not found on jettons till the second half of the 14th century; though it had occurred in the French gold

coinage, on the reverse of the *Chaise* and *Pavillon*, in the reign of Philip VI (1328-50). *Cp.* Feuardent's No. 6351; and see Rouyer and Hucher, pp. 119 *et seq.*; and La Tour, Nos. 343, 346, Pl. IX, figs. 4, 5. [Pl. III, 12.]

XIII.—Obverse of a Jetton of Marguerite, daughter of Raymond IV, Count of Provence, and Queen of Louis IX of France in 1234. The arms are a fleur-de-lys for France, and the coat of Aragon dimidiated. Raymond was a nephew of Peter II of Aragon. On the reverse is the famous coin-type of the *Châtel Tournois*, the nature and origin of which was explained in my lectures on English Numismatics, I, 238-240. Both faces of the coin are mute. This is La Tour's No. 202; and see his Pl. VI, fig. 2, reverse. [Pl. III, 13.]

XIV.—Obverse of a Jetton of Blanche of Navarre, second wife (1349) of Philip VI of France. She died in 1398. The arms are those of France-ancient and Navarre dimidiated. The legend on each face is the same: AVE MARIA GRACIA PLE[NA]. The type of the reverse is that of No. XII. This piece is described and illustrated by Rouyer and Hucher, p. 91; Pl. VIII, fig. 70; and by La Tour, No. 278, Pl. VII, fig. 11. See also Florange, I, 20; and Feuardent III, No. 11517 (still in MS.). [Pl. III, 14.]

XV.—A 14th century French Jetton showing a characteristic reverse of the period. The legend reads GARDES DE FALIR CONTE. On the obverse is the paschal lamb bearing a gonfanon on a cross-headed staff, with the legend AU MOUTON SUI BNATE. The last word is meaningless: pieces of this series often have blundered legends. This is Feuardent's No. 9497, for the lamb and flag type was tentatively placed by him with the jettons of the province of Berri, though it was certainly issued in other districts also, the *aignel*, or *mouton*, *d'or* (which ranged in date from Louis IX, 1226, till 1325 in the reign of Charles IV) being one of the French coins especially imitated by early jettons. The 'Mouton de Berri' was, it is true, the device of that province, and three sheep, two and one, were the charges on the arms of its capital, Bourges (*cp.* La Tour, p. 81;

Pl. XII, Nos. 12, 13, 14); but the lamb and flag, again, is the principal bearing on the coat of Rouen. (*Cp.* La Tour, No. 545, Pl. XIV, No. 15; and Rouyer and Hucher, p. 168, Pl. XVI, No. 132.) See also La Tour, No. 1032, who classes this counter under the *Agnus Dei* type, without reference to any locality. Many examples of these *Mouton* jettons bear evidence of their having been struck at the Tournay mint. [Pl. III, 15.]

XVI.—Reverse of a late 14th, or early 15th, century Tournay Jetton. The legend is O MATER DEI MEMENTO MEI. That on the obverse is the same, but, as the letters are rather smaller, A[VE] M[ARIA] is added to fill up the space. The obverse displays three circles arranged in triangle, one of the symbols of the Tournay mint: see Fontenay, 46; and La Tour, pp. 229 *et seq.* [Pl. III, 16.]

XVII.—Obverse of a Jetton struck either for use in the *Chambre des Comptes* of Dauphiné, or in imitation of such, probably in the time of Louis XI or Charles VIII (1461-98). The arms of France and Dauphiné quarterly occupy the field, and the legend is GETTES ENTENDES AU COMPTE. On the reverse the field is semy of fleurs-de-lys, and the legend reads, in continuation of that on the obverse, GARDES VOUS DE MESCOMPCTER. This is practically the same as Feuardent's No. 11318, of which, and others of similar character, he writes 'Imitations nurembergeoises?' The workmanship seems too good for this. *Cp.* La Tour, No. 89, Pl. III, fig. 14; and Rouyer and Hucher, p. 154, Pl. XIV, fig. 122. [Pl. III, 17.]

XVIII.—Reverse of a Flemish Jetton of 1487: a helmed lion supporting the shield of Flanders. The legend is ERIPE ME DE INIMICIS MEIS D[OMI]NE from *Vulgate, Psal.*, LVIII, 2. On the obverse is St. Andrew holding his cross before him, with the legend DILEXIS[TI] ANDREAM DOMINUS. The saltire, or St. Andrew's cross, was a device of the House of Burgundy (Favine, *Theater of Honour*, London, 1623, IV, v, 23), and St. Andrew was chosen as patron of the Order of the Golden Fleece, instituted at Bruges in 1429, by Philip the Good, Duke of Burgundy and Count of

Flanders and Holland (1419-67). This piece is probably from the Tournay mint and is Dugniolle's No. 323. [Pl. III, 18.

XIX.—Reverse of a Jetton of the Flemish mint, issued in 1491. The obverse displays the shield of Philip 'le beau' and and that of his father the Emperor Maximilian I impaled, with Flanders impaling Austria *en surtout*. The legend, which continues that on the obverse, reads DE LARCHEDUC PF[I]LIPE DUC DE BOURG[ONDIE]. The obverse type is the same as that of No. XVIII, with the legend IETT[ON] DE LA MONNOIE [*Mint*] DE FLANDR'. This piece is No. 442 in Dugniolle, and is described and illustrated by Van Mieris, I. p. 236, fig. 5. [Pl. III, 19.

XX.—Obverse of a Medalet-Jetton issued in 1430, probably from the Tournay mint, in commemoration of the marriage of Philip the Good, Duke of Burgundy, with Isabella, daughter of John I, King of Portugal: the parents of Charles the Bold. The type is the familiar device of Burgundy, the steel with flints and burning branches. The form of the steel of the period resembled the B of Burgundy. The legend on both faces is AVE MARIA GRASIA PLENA. On the reverse is a small cross potent fleury cantoned by four lys. This piece is practically the same as Dugniolle's No. 69; and *cp.* Rouyer and Hucher, p. 137, and Fontenay, pp. 105, 249, 334, 388. [Pl. III, 20.

XXI.—Obverse of a Jetton of the household of the Archduke Philip 'le Beau' (see No. XIX), issued *c.* 1486. The shields are those of France-modern, Flanders, Burgundy-ancient, and Austria-ancient. The legend is continuous from one face to the other: IETT [ON] DU BUREAU DES COMDTES DES || MAISTRES DOSTEL DE MONS[IEUR] LARCHID [UC]. The field of the reverse is occupied by the arms of Philip (see No. XIX) with an escutcheon of Flanders over all. *Cp.* Dugniolle's No. 325. [Pl. III, 21.

XXII.—Reverse of a Jetton of Nicholas Van Laen, Treasurer of Eleanor, 2nd wife of Francis I of France, sister to the Emperor Charles V and dowager queen of Portugal:

struck in the Low Countries in 1530. The arms are those of Van Laen, with the legend NICOLA[S] VA[NDER] LÆN TRESORI[E]R G[E]N[ERA]L D[E] LA ROI[N]E. This legend begins at the bottom of the coin, on the left-hand side, an arrangement which, though comparatively unusual, is not unfrequently found. The obverse displays the shield of France-modern impaling Spain and Burgundy, with the legend LEONOR[E] ROYNE DE FRANCE. This is Dugniolle's No. 1255, and is described and illustrated by Van Mieris, II, 328. Another counter of this official is given in Florange, No. 50. [Pl. III, 22.]

XXIII.—Obverse of a Medalet-Jetton, issued by the mint at the Louvre, to commemorate the Peace of Edinburgh between France and England, 6 July, 1560. The F is for Francis II of France, and the busts represent him and his wife, Mary Queen of Scots, or possibly their hoped-for offspring. The legend ABUNDANTIA PUBLICA GALLIAR[UM] presumably points to the expected results of the alliance with Scotland and the treaty with England. On the reverse is a standing female, gazing and pointing heavenwards, and resting one hand encouragingly on the head of another woman, seated at her feet. The latter holds an infant, and from her posture evidently is symbolical of the misfortunes of war. To the right of the standing figure lies a heap of discarded weapons with a laurel branch placed in them. In the exergue is an inscription FELICITAS GALLIAE, and the legend reads PIETAS REGIS INVICTISS [IMI]. The types on both faces of the coin are thoroughly characteristic of the classical designs which by this time had become the vogue, and the phraseology of the legends and of the inscription on the reverse, is borrowed from the Roman coinage. The type of the obverse was perhaps suggested by a first brass of Antoninus Pius with the heads of Marcus Aurelius and Lucius Verus, or by a reverse of Tiberius, on which Addison has much to say (*Discourse on Medals*, 1753, pp. 77-82); or, again, perhaps by a first brass of Drusus Junior, alluding to the fecundity of the Imperial Family, and representing the

twin children of Drusus and Livia. (See Stevenson, p. 289.) This piece is illustrated by Bie, Pl. 61, fig. 6; Pl. 62, fig. 1; and Pt. II, p. 185; and *cp.* Feuardent's Plates, I, fig. 10; Fontenay, p. 151; and *M.I.B.H.*, I, p. 98, Nos. 17-19. [Pl. II, 23.]

XXIV.—Obverse of a Jetton of the Emperor Charles V for Flanders. It bears a fine bust of the Emperor, and is dated 1548 on the reverse. The legend is CAROLUS V ROMANOR[UM] IMP[ERATOR] SEMP[ER] AUGUST⁹. The reverse displays the shield of Charles V supported by the double-headed eagle, and the legend reads GECTOIRS DU BUREAU DE LEMPEREUR: 1548. This piece, which is of Flemish manufacture, is Dugniolle's No. 1742; and *cp.* Fontenay, p. 373. [Pl. III, 24.]

XXV.—Obverse of a Medalet-Jetton, dated 1598, struck in the Low Countries to record the falling away of Henry IV of France from the treaty of alliance made two years before between England, France, and the United Provinces against Spain. The shields are those of France-modern, England, the United Provinces, and Zealand. The legend is DEO DUCE, COMITE CONCORDIA. On the reverse three forearms in plate armour, issuing from a central laurel wreath (or possibly a laureated buckler), hold each a sword. Above the wreath, or buckler, is the date 1598; in the middle of it is the name of Jehovah in Hebrew characters. The legend reads MUTUA DEF[ENSIO] TUTISS[IMA]. This extremely rare piece is Dugniolle's No. 3452, and Van Orden's I, No. 1040. See, too, *M.I.B.H.*, I, p. 173, No. 170; and *cp. ibid.* No. 146, and Van Loon, I, 471. [Pl. III, 25.]

NOTE ON A VASE OF MINOAN FABRIC FROM ABYDOS (EGYPT)

BY PROFESSOR JOHN GARSTANG

WITH PLATES XIII, XIV

This preliminary statement is published by request, pending the completion of Professor Garstang's 'Thousand Tombs of Abydos' in which a fuller description and illustration will be found.

In the spring of 1907, our Expedition was occupied chiefly with the excavation of a portion of the great necropolis of Abydos lying immediately to the north-west of the valley that leads up through the desert, from the township of the earliest dynasties, southwards towards the royal tombs of the same period. The growth of the necropolis on this side was fairly uniform. The earliest tombs are in general those nearest to the city, and the latest are those furthest removed in this direction; the periods represented range from the Old Kingdom to the New. A little past mid way (beyond the Old Fortress called the Shuneh-t-el-Zebib), in an area full of tombs of the middle Kingdom and Hyksos Period, near the edge of the valley, tomb 416 was found and excavated in the ordinary course of work. The gang of labourers was controlled by a foreman of experience, named Ambarak Aqab; this work went on under my personal supervision. The notebook references made during the excavation are in my own handwriting, and the inventory of the contents of the tomb is in the handwriting of the late Mr. Harold Jones.

The tomb was like others of the period: it consisted of a group of six shaft graves, side by side, built at one and the same time. The whole group was protected from the falling sand by a wall descending about 1·50 metres into the sand; and the dividing walls between the shafts, about two bricks thick, descended to about the same depth. At this level the harder gravel bed was reached, and through this stratum the shafts descended to a depth of about five metres without the support of masonry. Thus the shafts were only about half a metre apart from one another; and the partitions were of gravel. The chambers corresponded, being uniformly dug into the south-east ends of the shafts, at the bottom,

so that the six chambers lay practically side by side. As was not uncommon, the chambers were hollowed in a softer stratum of gravel than the roof above; in fact the depth of such tombs seems to have been largely determined by the point at which a conveniently soft stratum was found. This being the case, it not infrequently happened that in the course of time the slender partitions between the chambers fell; or were broken down by plunderers forcing their way through from one chamber to another, thus leaving a more or less continuous cavern, into which access might be gained from any of the six shafts. For this reason, we adopted the habit of numbering such tombs with a single number, distinguishing the various shafts, and, so far as possible, the various chambers, by separate small numbers. Furthermore, it is demonstrable that such groups of graves were constructed and first used in the same historical period. The shafts were first constructed by a speculator or contractor, who only prepared the chambers as they were required.

The contents of the tomb were in this case noticeably free from intrusive features and uniformly characteristic of the funereal arts of the XIIth Dynasty. It is unnecessary here to give the list in detail; it covers six of the inventory sheets. The objects for the most part, are massed together in a common list for the reasons stated above, but in the cases of the third and sixth graves (from the north), it was possible to discriminate to some extent, so that these received each their separate inventory. In the general list there is an unusual number of small glazed objects, including a hedgehog, two cats, several apes and monkeys, as well as a number of crude painted figures representing animals, wrestlers, musicians and so forth. There is a long list of the objects familiar to Egyptian tombs of the XIIth Dynasty; such as Kohl pots of alabaster and of dark stone; grinding palettes of dark stone and of slate; mirrors with wooden and stone handles, etc. Specimens peculiar to the XIIth Dynasty include necklaces of large globular glazed beads, long cylindrical glazed beads (such as were freely used in collars of the middle empire at Beni Hasan), and small beads of amethyst, garnet, etc., with amulets of mother of emerald: also small vases of 'blue marble'—a material hardly found in other periods. Confirming this general

evidence are two cylindrical cylinders inscribed with royal names of Kings Senusret III and Amenemhat III, as well as a private scarab of their period, inscribed with the name of the Steward *Sa-em-pet*. (See Pl. XIV.)

A noteworthy feature of these lists is the uniformity as to date; for we are accustomed, at Abydos, to find evidence of tombs having been re-used once at least, and possibly several times, in ages subsequent to that at which they were constructed. It was only in examining the surface-filling when the excavation was completed, that anything of a different period was discovered; that was however only the foot-end of a glazed Ushabti figure, such as are found littered about the surface of the sand in every direction, and therefore cannot be admitted in evidence. In this general inventory of objects from the common chamber, there are sixty items, not one of which suggests any difference of date or general character.

The third section of the tomb was somewhat better preserved than the rest, and the inventory of this portion reads as follows:—

- (a) Slate Kohl pot with lid, 5·2 cms.
- (b) Slate colour-mortar, 11·6 × 20·2 cms.
- (c) Diorite colour-mortar, 17 × 10·3 cms. with grinder, 4 cms.
- (d) Minoan ('Mycenean' in MSS.) Vase, in fragments.
- (e) Blue glazed 'draught-man holder,' 11 cms.

These objects are, with the exception of (d) similar in general character to others found in the tomb, and occasion no separate comment. The vase (d) which is now on view with some of the contents of this tomb, in the Ashmolean Museum at Oxford (No. E3295), is there described as a '*Cretan polychrome vessel in a style characteristic of the second middle Minoan period.*' (See Plate XIII.)

The sixth portion, that is the most southerly, was also partly separable, and has, accordingly, its own inventory amounting to a dozen items. These again do not call for detailed observation, comprising alabaster Kohl vessels, a standing dark stone vase tapering to the base, of typical middle empire form, two vessels of blue marble or blue alabaster, the use of which material is practically confined to the middle empire, and so forth.

One portion of the tomb alone remained undisturbed so far as ancient plunder was concerned. This was in an upper chamber of the second section, and it owed its preservation doubtless to the fact that the plunderers had gained access to the chambers below by way of another shaft, but had not taken the trouble to open up the shaft in question, and consequently remained unaware of this upper chamber. It contained, however, nothing specially instructive. In it a body had been placed with head to the south, facing west. At the foot were a stone palette with grinder, and a Kohl pot of a dark stone, and near the head were a few beads,—all uniform in character with the objects already mentioned. The subsidence of the chamber at the back made further excavation of it impracticable.

Our present subject of enquiry being the circumstances attending the discovery of the Minoan Vase found in the third section of the tomb, there remains little to be said. Every object found inside the tomb to a number of more than a hundred was of XIIth Dynasty character, and we cannot doubt that the inscribed cylinders of Amenemhat III and Senusret III gave a reliable date to the whole group. There is nothing to suggest that the vase in question is not a contemporary deposit,—in fact any other conclusion would be unjustifiable. In many tombs of this site, the usual mixing of dates might have complicated the argument, but in this case no such difficulty arises. It is proved beyond reasonable doubt that the Minoan Vase was found in a XIIth Dynasty tomb, and is therefore at least as old as the contents of the tomb. It may of course be still older, so far as our evidence is concerned.

The further problem of the actual date in years to which this object must now be assigned, is not in any way connected with the excavation of the tomb. Those who believe that the Hyksos period in Egypt was not as long as tradition would have it, and who eke out the paucity of historical evidences rather by archaeological considerations,—chiefly the changes in forms and character of objects, and in burial customs, (the standard criteria), if any,—between the end of the middle empire and the beginning of the new empire, may place the date of Senusret III as late as 1900 B.C. It must be said at once, however, that the Egyptian sources of

evidence on this point are not satisfactory, because the material is too slight: but even the little material evidence that remains, is, in my judgment, a more reliable basis for chronology than distorted traditions, and the strung-out lists of possibly contemporary local 'dynasties.' The links with Crete provide a much better standard and basis of judgment, for the development of culture there, between epochs now determinable, is well illustrated by a continuous series of archaeological evidences recovered by methodical excavation and research. It is necessary however to bear in mind the inherent difference of local conditions and environment.

The date recorded in the Ashmolean Museum for the second middle Minoan period, which is that of the earlier palace, is 2000 to 1800 B.C. This conclusion agrees entirely with our own view.

ARE WE JUSTIFIED IN SPEAKING OF A MEGALITHIC RACE ?*

By T. E. PEET, B.A.

WITH PLATE XV

Since 1872, when General Faidherbe read to the Prehistoric Congress at Brussels his paper on the dolmens of Algeria,† the question of the origin and meaning of the megalithic monuments has been a subject of speculation to archaeologists. The Congress at Stockholm two years later gave a further impetus to the discussion, which continued somewhat spasmodically until the appearance in 1897 of Montelius' *Orient und Europa*, where a definite point of view was laid down which seems to have satisfied many archaeologists and to have provoked but little criticism from the rest. From that date the general question has been inclined to stagnate, though work on particular monuments and groups of monuments has always been in progress. It has, however, just been revived by the remarkably interesting point of view put forward by Professor Elliot Smith in his book *The Ancient Egyptians*, with regard to the origin of megalithic architecture. The last five years, too, have seen much new research, especially in Sardinia, Malta and Syria, and as a result we are far better qualified to decide questions of date and origin than we were in 1897.

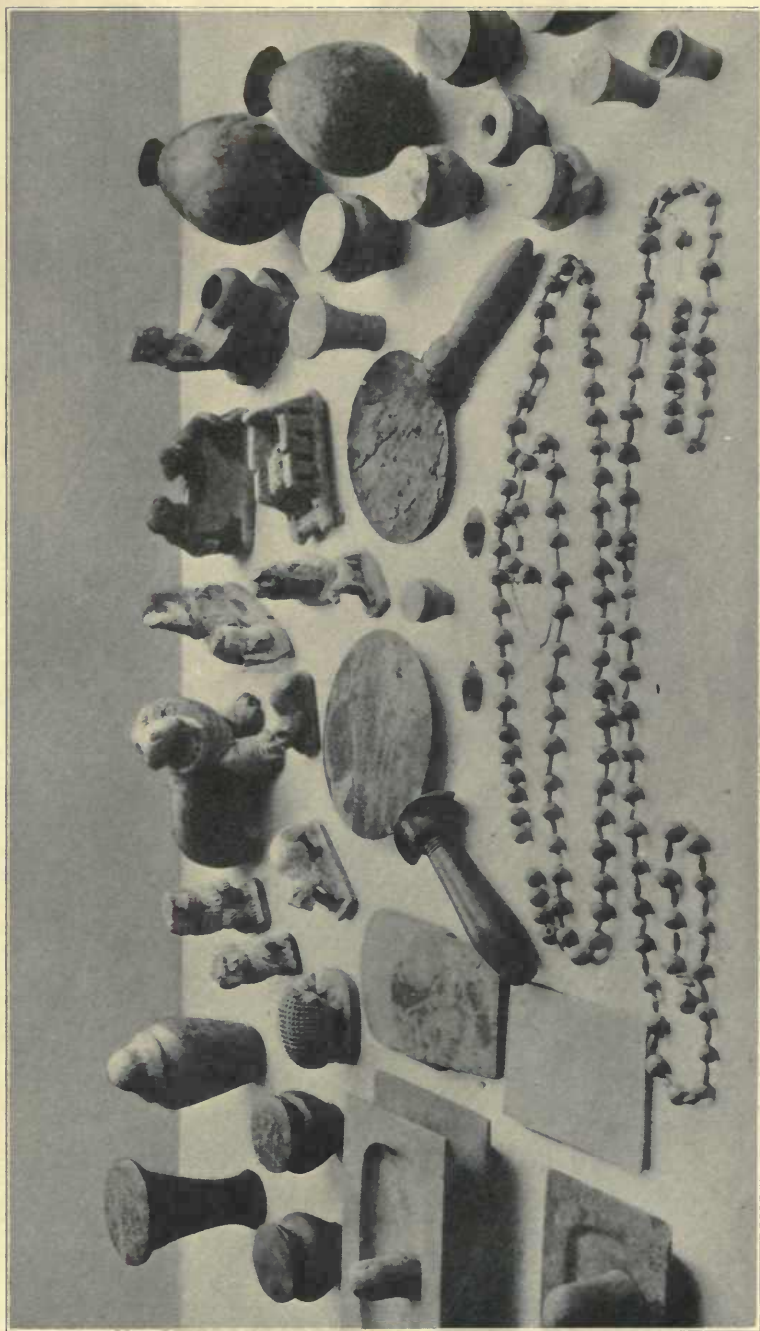
The great problem with which we are brought face to face is as follows: Buildings of peculiar types, made of huge blocks of stone, usually unworked, are found in certain parts of a vast geographical area extending from Portugal to Japan and from Sweden to Morocco. What is the meaning of this phenomenon?

Three possible answers suggest themselves. The custom of building megalithic monuments may have arisen independently in

* This article reproduces in substance a paper written for the Dundee meeting of the British Association. Owing to lack of time it was impossible to read more than a portion of the paper at that meeting, and it therefore seemed advisable to reproduce it in its entirety.

† *Compte-rendu du congrès d'archéologie préhistorique*, Bruxelles, 1872, pp. 406 ff. The still earlier work of Bonstetten, *Essai sur les dolmens* (Geneva, 1865), should be mentioned.

ABYDOS: EGYPT.



Tomb 416. A. '07.

SELECTED GROUP OF OBJECTS FROM THE TOMB DEPOSIT.
(Now in the MacGregor Collection (Tannorth) and the Ashmolean Museum.)

See p. 108.

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MAP TO SHOW THE DISTRIBUTION OF MEGALITHIC MONUMENTS IN
EUROPE, AFRICA AND WESTERN ASIA.

the countries in which we find it. Or, in the second place, it may have arisen among a single people and spread to others connected with them by trade or other relations. Or, in the third place, the spread of the custom from a single centre over a large area may have been due to an actual migratory movement of the people among whom we are supposing it to have originated.

The first of these theories, that which postulates a number of independent places of origin for the monuments, has found a keen defender in Mr. A. A. Lewis.* He says: 'The building of dolmens was not confined to one race and the building of circles to another, nor was there any one race which originated and diffused both; but rather that megalithic building was a phase of culture through which many races have passed and which was developed in different ways not only by separate races but also in very restricted localities by different tribes, without regard to any racial differences or connections between them.'

To this theory there are several very serious objections. It is, at the outset, unlikely that a method of building which is to a great extent unnatural, consisting as it does in the use in small buildings of huge blocks of stone when much smaller and more manageable ones would have served the purpose equally well, should have arisen independently among so many peoples. If the phases of culture through which all or even many races pass be examined, it will be found that they are all in some way natural, or even necessary. Thus most nations have passed through a phase of employing copper for the simple reason that copper is more workable and more lasting than flint. In the same way almost all nations have passed on to use iron instead of copper, because it will take a better edge and can be produced in a much harder form. These are natural stages in a rational development. But such an argument cannot be urged in the case of megalithic monuments. The use of huge blocks of stone is not at all a necessary stage in the evolution of architecture. The natural origin of architecture lies in the putting together of stones of convenient size, and this corresponds exactly to what we actually find in the earliest buildings of Crete and Egypt, in which latter place, however, the conditions are complicated by the occurrence of mud brick at a

* See *Anthropological Journal*, XXXVIII, pp. 380 ff., and XL, pp. 336 ff.

very early date. Constructions of very large blocks are as a rule the product of the builder who has had a long experience, which has given him the courage to employ, and the skill to fit, such blocks.* The use of huge stones in an early stage of a people's civilization is therefore an abnormality to be accounted for by some special reason, and it cannot be explained as a phase which many nations passed through as a natural course. That it should arise independently in even a very few countries is unlikely, but to suppose that it did so in a large number, when the very geographical position of these makes collusion evident, is impossible.

Again, whereas Mr. Lewis has laid emphasis on the local differences between the monuments, what is far more striking is their similarity over the whole area in which they occur. For megalithic building is not merely the use of huge blocks of stone, it is their use in particular ways and according to a well-defined system. Its central principle is the employment of orthostatic slabs, i.e., slabs set up on their edges instead of being laid flat. In some instances these slabs form the whole height of the wall, and the building is roofed over with horizontal blocks of stone. In cases where the walls are to be higher, or where the areas to be roofed are larger, the upright slabs form the lowest course, and above them are laid more or less horizontal courses of smaller blocks. In this case the roof is formed by corbelling, i.e., each successive course of blocks projects slightly forward over the last, so that the walls curve inward as they rise, and finally form a vault or dome. More rarely, as in the *nuraghi* of Sardinia and the *sesi* of Pantelleria,† the orthostatic principle is abandoned and roughly-coursed masonry is used throughout.

* To the suggestion sometimes made that the pyramids and the palaces of Crete have just as much right to be included under the term megalithic buildings as, for example, the temples of Malta, and perhaps more right than the *talayots* of the Balearic Isles and the *nuraghi* of Sardinia, where the stones are not all of immense size, it may be replied that there is nothing in common between the finely fitted horizontal masonry of Crete and Egypt and the unworked or roughly-squared orthostatic blocks of Malta. As for the *talayots* and *nuraghi*, even if their own construction does not show them to belong to the true megalithic civilization, the other monuments which are found with them, and which have been shown to be the graves of those who lived in them, show every characteristic of the megalithic style. The Cretan and Egyptian buildings belong to an entirely different tradition of architecture, and I cannot for a moment admit the possibility of Montelius' suggestion that the pyramids are merely improved derivatives of the dolmens.

It is worth while to remember, as a characteristic of megalithic buildings, that they are *small* structures built with incongruously large blocks of stone.

† *Monumenti Antichi*, IX, pp. 449 ff.

These same methods of building, particularly the principle of the upright slab, are found in all parts of the megalithic area, and point very strongly to a single centre of diffusion. This argument is strengthened by the remarkable similarities of detail noticeable in monuments existing in countries far apart from one another. Thus the simple dolmen occurs in practically every part of the megalithic area. Other types of monument have an equally wide distribution. The so-called wedge-shaped tomb, for example, common in the province of Munster in Ireland, consists of a simple *allée couverte* running east and west, and widening out considerably towards the west end.** This same widening at the west end is

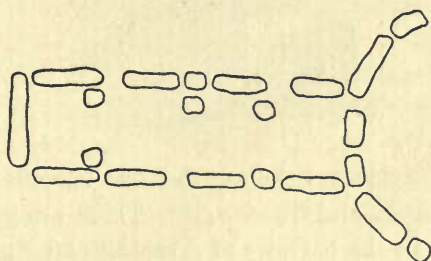


FIG. 1. Megalithic Tomb with curved façade at Annaclochmullin, Ireland.
(After *Etruria Celtica*.)

also a feature of certain megalithic monuments in Scandinavia,†† Germany, Holland, Portugal, Syria,* and the Deccan in India.† Again, a feature of many megalithic structures is a curved façade in the centre of which the doorway is situated. Such a façade is seen in the so-called temples of Malta,‡ in the Giants' Tombs of Sardinia,§ the *naus* of the Balearic Islands¶ (where, however, the curvature is very slight), in the horned cairns of Caithness,||

** Borlase, *Dolmens of Ireland*, Vol. I, fig. 23.

†† Montelius, *Dolmens en France et en Suède*, pp. 8-9.

* Borlase, *op. cit.*, figures an example from the Jaulan in Syria.

† For these and for the dolmens of India in general see *Transactions of the Royal Irish Academy*, XXIV, 1865.

‡ See Albert Mayr, *Die Insel Malta*, fig. 5. For still better examples see the plans to be published in *Papers of the British School of Rome*, Vol. VI, especially that of the largest of the Cordin buildings.

§ *e.g.*, Mackenzie in *Ausonia*, Vol. III, p. 36, fig. 21.

¶ See the *Nau d'Es Tudons*, Cartailhac, *Monuments primitifs des îles baléares*.

|| Montelius, *Orient und Europa*, fig. 125.

in the long barrow of West Tump in Gloucestershire, in the grave of Annaclochmullin and the cairn of Newbliss** in Ireland, and in a tomb at Maughold in the Isle of Man.††

A further resemblance in detail between monuments far apart is to be seen in the small holes or windows which so often occur in one of the end uprights, or in those which sometimes divide a long grave into sections. Such windows are common in the dolmens of India.§ They are found in the Caucasus,‡‡ Palestine, Syria, §§

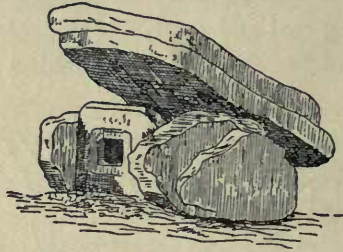


FIG. 2. Holed Dolmen at Ala Safat, Syria. (After De Luynes.)

Sardinia, ¶¶ France ||| and Sweden.*** There are good examples in our own country in the barrows of Avening and Rodmarton, ††† in the dolmen of Plas Newydd in Wales, and in the monument known as Orry's Grave in the Isle of Man. ‡‡‡ It is not impossible that the famous pierced stone known as the Lanyon Quoit, in Cornwall, at one time formed part of a megalithic tomb of the type under discussion. The peculiar cup-markings sometimes found on the megalithic monuments form another link between far distant countries, for they occur in Palestine, North Africa, Spain and Portugal, Corsica, France, the British Isles, Germany and Scandinavia.*

** Borlase, *op. cit.*, figs. 269 and 278.

†† Kermode and Herdman, *Manks Antiquities*, fig. 17.

§ See *Trans. Royal Irish Acad. loc. cit.* The double dolmen of Coorg figured by Montelius *op. cit.* is a good example.

‡‡ Borlase, *op. cit.*, Vol. III, pp. 722 ff. Also *Matériaux pour l'histoire de l'homme* 1885, pp. 545 ff.

§§ De Luynes, *Voyage à la Mer Morte*, Vol. I, p. 135.

¶¶ *Ausonia*, Vol. III, fig. 30.

||| *Anthrop. Journal*, 1910, p. 337.

*** Montelius, *Dolmens en France et en Suède*, p. 9.

††† *Archaeologia*, XVI, p. 362, XLII, pp. 216-7; *Proceedings. Soc. Ant. Lond.*, 2 ser. II, p. 277.

‡‡‡ Kermode and Herdman, *op. cit.*, pp. 48-9.

* Montelius, *Orient und Europa*, p. 26 ff. The Maltese examples probably serve an entirely different purpose, being merely ornamental.

These remarkable resemblances of general principle and of detail are not due to mere coincidence. They can only be explained by the supposition that megalithic architecture had a single origin, from which it spread into the countries in which we find it.

The date and geographical distribution of the monuments both point to the same conclusion. One often hears the careless statement that they are of very various dates. This is not strictly correct. Those of Europe and Africa mostly begin in a single period—the end of the Stone Age, or the transition to the era that followed it. To this period may be assigned, for example, the monuments of Malta, many of the *nuraghi* and Giants' Tombs of Sardinia, the monuments of Spain and Portugal and of France, the Long Barrows of England, and the dolmens and more complicated tombs of Germany and Scandinavia. For other examples, such as those of the Caucasus and the Crimea, we are entirely without evidence. Even in Africa, where some of the tombs are certainly of the Iron Age, there are others which are earlier, showing that the production of megalithic monuments in this region may well have *begun* at the date we have specified above. The existence of megalithic monuments of late date can never be an argument against derivation from a single source so long as it cannot be shown that there are no early examples in the same district. Thus in Algeria we know that there are some dolmens which have yielded objects of iron, but this does not justify us in supposing that the dolmens of Algeria all belong to the Iron Age. Only a very few out of many hundreds have been excavated, and MacIver has given reasons for thinking that the parts of the cemeteries dug are the latest and not the earliest.† So in India, too, several of the dolmens excavated are said to have contained iron, but this is no argument for the late date of the rest, and until many more have been explored we have no ground for asserting that there are no dolmens of the late stone or early metal age in India.

Thus the argument from the date of the monuments, so far from telling against the idea of their having a single origin, is rather in favour of that idea, at any rate in Europe, where the earliest of them in each country all date from one period—the end of the Stone Age.

† See MacIver and Wilkin, *Libyan Notes*, p. 93.

The argument from their geographical distribution is even more convincing. If we omit the Japanese examples, which we shall have to consider later, we may say that they begin in India and move west to Persia, Syria and Palestine, whence a by-path leads to the Caucasus, the Crimea, and Bulgaria.* The main line keeps to the north coast of Africa, running through Tripoli, Tunis, Algeria and Morocco. Thence it branches off to the north to Malta, Lampedusa, South Italy, Sardinia, Corsica, the Balearic Isles, Spain, Portugal and France, and finally up to the British Isles, Scandinavia, and the German shores of the Baltic. If megalithic monuments arose independently in all these regions, it is an extraordinary fact that they should lie, as they do, on the shores of a long natural sea route while the centre of Europe is entirely free from them. Surely the only possible explanation of their peculiar distribution is that they arose from a single source and thence spread into distant parts.

If this is the case, it only remains to account for their distribution over so wide an area. And here, as we saw at the outset, two possible explanations suggest themselves. Either they were spread among various peoples by the influence of relations set up by trade, or they were introduced into various countries by a single race in the course of a great migratory movement. These two theories we may for convenience of reference describe as the influence and the migration theories respectively. The former seems to have been regarded with the more favour by archaeologists, and yet it is not easy to see why, for it involves several very grave difficulties.

In the first place, were the countries which lay scattered along the great sea route which we have described in close enough touch with one another to account for the spread among them of megalithic building? No doubt certain trade relations existed even in neolithic times, but though we are apt to talk rather freely of the early trade routes, we have often little evidence to support our ideas. Within certain circumscribed areas, such as the Aegæan, a lively trade is known to have existed in the Bronze Age, but we have no right to push this back into the earlier periods or to apply

† * This is merely a description of their distribution, not of the direction in which they actually moved.

it to far wider areas, except in cases where we have definite and sure evidence. Almost yearly we are finding that some material once supposed to have travelled hundreds and even thousands of miles by way of trade occurs in a natural state much nearer home. Thus the jadeite used in the manufacture of stone axes at Alba in North Italy was once supposed to have come from the east, but the raw material has now been shown to exist in the Alps and Apennines only a few miles from Alba* Archaeologists have pointed, moreover, to the peculiar kind of turquoise, called *callaïs*, which occurs in certain megalithic tombs of France and Portugal, as a proof of wide trade relations in the megalithic period. But it has to be remembered that this stone has been found in no megalithic tombs except those of the countries mentioned, and that the idea that it came from the east is the purest assumption. It is far more probable that it occurred in a native state in France or in Portugal, or even in both.

It was probably the discovery of copper which did more than anything else to improve trade relations between one country and another. Flint was to be had in some form in almost every country, but copper was of such paramount importance in the struggle for existence that its importation became almost a necessity for any country which had not its own supply. Thus the trade of the early metal age was largely a necessary product of that age, and proves nothing with regard to the trade of the neolithic period. This being the case, it is far from certain that in the neolithic age the relations between the various parts of the megalithic area were strong enough to account for the spread of this remarkable custom. We have an excellent test case in Malta. Here, copper seems never to have been introduced at all, the only flint found is of the wretched quality which the island itself provides, and there is no trace whatever of trade or foreign influence of any kind. And yet Malta possesses some of the finest megalithic monuments in existence. The only possible explanation is the perfectly simple one that Malta formed one of the bridges used by a race who were builders of megalithic monuments in their migrations from Africa to Europe, or vice versa, and that a part of the race remained there and built the famous megalithic temples. The argument is

* *Atti del Congr. Internaz. di scienze storiche*, Rome, 1903, Vol. V, pp. 357-371.

rendered more cogent by the fact that excavation is each year making it more probable, if not certain, that these builders of megalithic monuments were the earliest inhabitants of Malta, and that they brought the custom with them when they entered the islands.

On the other hand, the theory that the monuments were introduced by trade relations involves the assumption that such relations existed in the neolithic period over a very large area, and moreover, that these relations were strong enough to pass on not only products but customs from one country to another. If the upholders of this 'influence' theory could really imagine what this involves, they would probably be surprised by their own boldness. In the history of civilisation it is natural that any discovery which confers a real benefit on man should tend to spread. Thus the use of copper tended to spread, the discovery of edible cereals tended to spread, and the employment of the horse as a beast of burden tended to spread. But it is hard to see what attraction there was in megalithic monuments which caused them to spread, or what advantage their inventors could have in forcing their diffusion. Thus, though the traders of one part of the megalithic area might have been interested in finding a market for their copper in some other part, they would have no possible reason for wanting to persuade their customers to use megalithic monuments for the burial of their dead, nor would these latter, even if in the course of conversation they heard that such monuments were used elsewhere, or actually saw them in place, gain any advantage by adopting them themselves.

A further point which is apt to be overlooked is that the trade which, according to the advocates of this theory, brought the megalithic monuments cannot, from their geographical position, have been anything but a sea-borne trade. Now a sea-borne trade brings commodities rather than customs. Thus we can imagine that a people who lived on the confines of the nation who discovered the use of cereals, or the domesticating of animals, would be likely to adopt the new discovery, for they would have every opportunity of seeing it at work and appreciating its value. On the other hand, a people separated from the discoverers by a long stretch of sea would have far less opportunity of adopting the new discovery

as they would hear of it only from occasional travellers and traders. Thus it comes about that a sea-borne trade will rapidly diffuse a commodity such as copper or gold, but is at a disadvantage in spreading a mode of living or a custom, even when this happens to be a really useful one. Much more is this true of a custom which is not in itself of any value to humanity, such as the use of megalithic monuments.

To this it may perhaps be replied that what this trade spread was the use of stone for building purposes, and that as the only kind of architecture then in vogue was megalithic, this was the form in which the new discovery spread. In answer to this it has already been pointed out that megalithic architecture is an unnatural and abnormal system, depending for its origin on peculiar circumstances. It is unthinkable that the many peoples who, we are to believe, were taught by trade to use stone should all have used it in huge unwieldy masses instead of building with smaller pieces, which are far more easy to obtain and far easier to set up. This trade theory would, further, not account for the exact similarity of the monuments in far distant parts unless we are to understand that the actual monuments were conveyed from one country to another by ship and set up by foreign workmen sent over for the purpose.

There is another even more serious objection to what we have called the 'influence' theory. It overlooks the fact that megalithic architecture is in the main religious and funerary in character. We know that in certain cases, such as the *nuraghi* of Sardinia, and probably the *talayots* of the Balearic Isles, it was applied to the houses of the living, but more usually its aim was to provide a temple for the gods or a tomb for the dead. In origin it was almost certainly funerary, as may be seen from its simplest and oldest manifestation, the dolmen. Among primitive peoples nothing is more sacred than the rites connected with the burial of the dead. There is nothing in regard to which early races are more conservative and in which they oppose more violently change or modification of any kind. Yet the advocates of this influence theory would have us believe that, not merely in one country but in many, the inhabitants were induced by mere foreign influence to make a complete change in their methods of burial. In other

words, the people of Spain, hearing from traders that the people of Algeria or elsewhere were accustomed to bury their dead in dolmens, gave up their ancestral custom of interring the dead in a trench in the bare earth, and all the associations connected with it, and adopted the dolmen. This seems quite incredible.

It is curious that while so many archaeologists are wont to point to similarity of burial customs such as the rite of contracted burial as a proof of identity of race, they should fail to see that the equally strange custom of burying in dolmens has precisely the same cogency.*

The influence theory has lately been presented in a very attractive form by Professor Elliot Smith in his book *The Ancient Egyptians*.† He there advances the theory that the building of megalithic monuments in the Mediterranean was an attempt to imitate the accomplishments in stonework of the Egyptians, and that megalithic monuments did not appear until the aeneolithic age because the rise of architecture followed the discovery of copper in Egypt. This theory is by no means free from difficulties. In the first place, to say that copper was discovered in Egypt is still an assumption, and many archaeologists find it hard to accept the paradox that the use of copper was discovered in a country where no copper existed.‡ In the second place, proofs of the early

* It should be noted that the converse of this proposition is not necessarily true. Thus two peoples who use the contracted position are probably sprung from a common ancestor. On the other hand there may be peoples also sprung from the same ancestor who no longer use this position. But they gave it up by a process of internal development in burial rite and not at the suggestion or dictation of traders. In other words diversity of custom is not necessarily a proof of diversity of race, but only of a long period of separation. The megalithic people, like their neolithic predecessors in Europe, often used the contracted position. This suggests that they were in remote origin not unrelated to these predecessors, an idea which is confirmed by the similarity of the skull types. In this case the use of megalithic monuments must have been evolved among them after the first (early neolithic) branch had already broken away from the common home in Africa or elsewhere.

† pp. 168 ff.

‡ The Egyptian copper of course came, in dynastic times at least, from Sinai, and it is clear that King Mersekha of the Ist Dynasty carried on mining operations there. But we have no evidence to show that the Egyptians were the first people to mine the metal there. It is most unlikely that they should have discovered a new material in a country in which they did not live and to which they had no incitement to go until they heard that they could there obtain a material whose value they had already learnt by experience. That the Sinaitic peninsula was at this early date in other hands is clear from the statement of Mersekha himself when he tells us he had to repel the attacks of the local tribes. These were perhaps the lawful possessors of the mines.

[Copper in the form of carbonate, chloride, etc., is present in the gneisses and schists of the Eastern Desert, and there are old workings at Absiel and Abu Hamamid. See W. F. Hume, *Preliminary Report on the Geology of the Eastern Desert of Egypt*, 1907, pp. 56-57. Ed.]

relations of Egypt with even so important a centre as Crete are scanty and unconvincing, and it is therefore improbable that Egypt was in such close relations with the far less important parts of the Mediterranean as this theory would require. In the third place, Egyptian and megalithic architecture are so entirely and essentially different that it is impossible to derive one from the other. In Egypt we can trace the rise of architecture from the simple mud-brick work of the early first dynasty to the fine stone temples of the sixth, to which latter period Professor Elliot Smith assigns the influence which created the megalithic monuments. In all this there is nothing which bears the slightest resemblance to the buildings of huge unworked blocks found in the megalithic area. It is true that in Egypt very large blocks of stone were sometimes used, but their use was neither original nor essential, while in the megalithic monuments it was both. In the supposition that other peoples learned the art of using stone from the Egyptians there is nothing radically impossible, but that any nation was foolish enough to use vast unwieldy blocks of stone where smaller ones would have served equally well, just because the Egyptians used large blocks in their temples, is incredible. The fact is that megalithic architecture is far too vast and homogeneous a system to be explained as a mere effort to imitate some already existing type of building. Such an explanation will not account for the occurrence of such a form as the dolmen, which incidentally has no resemblance to any Egyptian building, in countries so far apart as Syria and Sweden. Where Professor Elliot Smith's theory really fails is in not recognising that in megalithic architecture the essential point is the size of the stones. It is hardly possible to avoid the conclusion that for the people who built these structures great stones themselves had some particular meaning and sanctity. The very existence of menhirs of vast size is a testimony to the truth of this. The discoveries in the so-called temples of Hagiar Kim and Mnajdra in Malta show that pillars of stone were there worshipped,* and if great stones had a religious value as such, it is natural that they should have been regarded as peculiarly fitted for use in building the abodes of the dead.

* See Evans, *Mycenaean tree and pillar cult* in J. H. S., XXI, pp. 196-200; Mayr, *Vorgeschichtliche Denkmäler von Malta*, p. 723.

Such are the difficulties with which any attempt to explain the megalithic monuments as due to trade or similar influences is confronted. We are thus driven to adopt the third of our possible explanations, namely, that megalithic building was originally the property of a single race and was carried from one country to another by members of that race in the course of an immense migration. If there be any objections to this they are those of feeling rather than those of reason. Archaeologists are, perhaps rightly, a little nervous about postulating great racial movements in early times. Yet the same people are often only too ready to assume the existence of long trade routes in these remote periods, forgetting that to a great extent trade, for primitive peoples, is a luxury, while migration is often a condition of existence. After all, there is nothing impossible or even improbable in the idea of a great migration covering the whole of the megalithic area. Many archaeologists now talk confidently of a very similar but even greater migration which gave to the Mediterranean and other parts of Europe their early neolithic population. The invasion of Central Europe by the so-called Alpine Race is almost an established fact, and in mediaeval times the Arabs covered in their great migrations a considerable part of the actual megalithic area.

If such movements as these were borne in mind the idea of a migration over so large an area as that postulated would lose its terror. After all, the area actually covered is not so large, for in most cases it concerns only the coasts. The whole of Central Europe is left untouched, and even on the shores of the Mediterranean, which must have been somewhere near the centre of the movement, large portions of country such as the Aegæan, Greece, Thessaly, probably the greater part of the Balkans, the whole of Italy except a small corner, and, so far as we know, the whole of Asia Minor are entirely unaffected. In Africa the north shores alone seem to have been affected. In Asia it is difficult to be precise, for exploration is yet in its infancy. Syria and South India must certainly be included in the area, and there are apparently traces in Persia and elsewhere. We do not know enough of the megalithic monuments of Japan* to say whether the movement spread as far east as that country, and it is perhaps

* *Archaeologia*, LV, pp. 439 ff.; *Anthrop. Journal*, 1907, pp. 10 ff.

better to reserve judgment until we have further evidence as to Japan itself, where incidentally the simple dolmen has not yet been found, and as to the countries which separate Japan from India.

The criticism which Montelius applied to this migration theory in 1897, even if valid at the time, could hardly be considered so now.* He says that the builders of the megalithic monuments cannot all belong to a single race, for 'in Europe at that time dwelt Aryans, but the Syrians and Sudanese cannot be Aryans.' Now, it may be true that there were Aryans dwelling in Europe at the time, but they were not the only race dwelling in Europe. Moreover, it is precisely in those parts of Europe where Aryans were not living that megalithic monuments appeared, while there is no trace of them in the parts where Aryans were living. He further asks: 'If these forms were built by Aryans, why do they fail to appear in so many Aryan lands?' Here he is fighting a shadow, for no one supposes that they were built by Aryans, and it is precisely because they were not that they do not appear in Aryan countries. Similarly, when Montelius asks 'Why do megalithic monuments occur among the Kelts of the British Isles and France, but not among their close relations in South Germany?' we reply that, strictly speaking, they do not occur among the Kelts of the British Isles, for they were already there when the Kelts came.

Such, as far as I know, is the only criticism which has been made of the migration theory of the megalithic monuments, and despite the high authority from which it comes it seems to leave the theory quite unscathed. Nevertheless, it seems to have been accepted in silence, for since that time until quite lately no voice has been raised to protest. Indeed, one of the latest writers on the subject, Déchelette,† seems to consider the matter as so certain that it needs no discussion, for he says of the single race theory, 'Anthropological observations have long ago destroyed this risky hypothesis.' Unfortunately he is so convinced of this that he omits to tell us what those observations are. The only anthropological observations which can possibly bear on the question are the

* Montelius, *Orient und Europa*, p. 30 ff.

† *Manuel d'archéologie préhistorique celtique et gallo-romaine*, p. 427.

measurements of the bodies actually found in megalithic tombs. Not many measurements have been taken, but those that have certainly do not destroy the hypothesis of a single race. On the contrary, they rather confirm it. The type of skull found in the tombs shows a strong tendency to dolichocephaly. Thus a set of skulls from the Algerian dolmens ranged in cephalic index from 70·5 to 84·4,* the average being 75·27, and most of the skulls lying within a few units of that average. Ten skulls from the Hypogeum of Halsafieni in Malta ranged from 66 to 75·1, the average being 71·84.† A series of British skulls, mostly from long barrows, ran from 67 to 77.‡ Similarly the skulls from the Scandinavian megalithic tombs are mainly dolichocephalic. In France the type seems more variable, especially in the dolmens of Lozère, where distinctly brachycephalic heads occur. This fact, so far from disproving the idea that the dolmens were spread by a single race, is not even surprising, for wherever the megalithic builders went they were certain in course of time to become contaminated by intermarriage with the other races with which they came in contact. In many cases we shall probably never be able to detect this contamination, for, as Professor Elliot Smith has rightly pointed out, the megalithic builders would in many cases be of much the same type as the races with whom they were brought face to face. It is precisely in such places as France, where we know there were brachycephalic people dwelling at a comparatively early period, that we are bound to find traces of intermixture. Hence the finding of brachycephalic types in the Lozère does not in any way affect the truth of the theory we are here defending. In fact, it is doubtful whether any evidence based on the occurrence of intrusive types of skull would be really fatal to that theory. If we found that the megalithic tombs of one country gave distinctly different types from those of another, and that in each country the megalithic tombs gave the same types as the non-megalithic types of the same period, the single race theory would be endangered. What we actually have is, as far as we can judge from very scanty observations, a fairly homogeneous type of skull over the whole

* Faidherbe's measurements, repeated by MacIver in his *Libyan Notes*, Plates 18-19.

† Zammit and Peet, *Small objects found in the Hypogeum of Halsafieni*, p. 24.

‡ Sergi, *Europa*. I have not the book by me to give the page reference.

area examined, with intrusive exceptions in France; and this is precisely what our theory would lead us to expect. The occurrence of 'Giza traits' in one or two of the Algerian skulls to which Professor Elliot Smith refers is in complete harmony with his own theory of the spread of the 'Giza race' in the Mediterranean.*

In suggesting a single place of origin for the monuments, we perhaps lay ourselves open to a request to say where such place of origin was. Montelius conceived the dolmen as coming from the east, i.e., from Asia, and he has been generally followed. Reinach, in his remarkable paper *Le Mirage Oriental*, protested against this, and suggested that the megalithic monuments arose in North Europe.† He argued that the earliest types, such as the dolmen, occurred most frequently in Scandinavia and became rarer as one moved south. This last statement is true of Germany, but it goes no further, for the simple dolmen was known even at that time in South Italy, and it has since been found in Malta and Sardinia. The argument sometimes urged that the movement was from north to south, because in France the more northerly monuments are neolithic in date while the more southerly belong to the copper age, is fallacious, because copper may well have been introduced into the south of France earlier than into the north.

Mackenzie seems inclined to suggest North Africa as the original home of the megalithic monument.‡ It is possible that he is right in this, and that, just as in the early neolithic period, some natural phenomenon, perhaps the decrease of rainfall in what is now the Sahara, drove the hordes of North Africa into the islands of the Mediterranean and into Europe, so, at the end of that period, a further decrease produced a second great migration and gave us the megalithic monuments. Yet, however probable this may seem, it remains, and perhaps always will remain, in the region of conjecture.

There are many points in connection with the megalithic monuments which are not yet clear, and probably never will be. The present paper is nothing more than an attempt to account for the facts as we have them. Future discoveries may enable us to

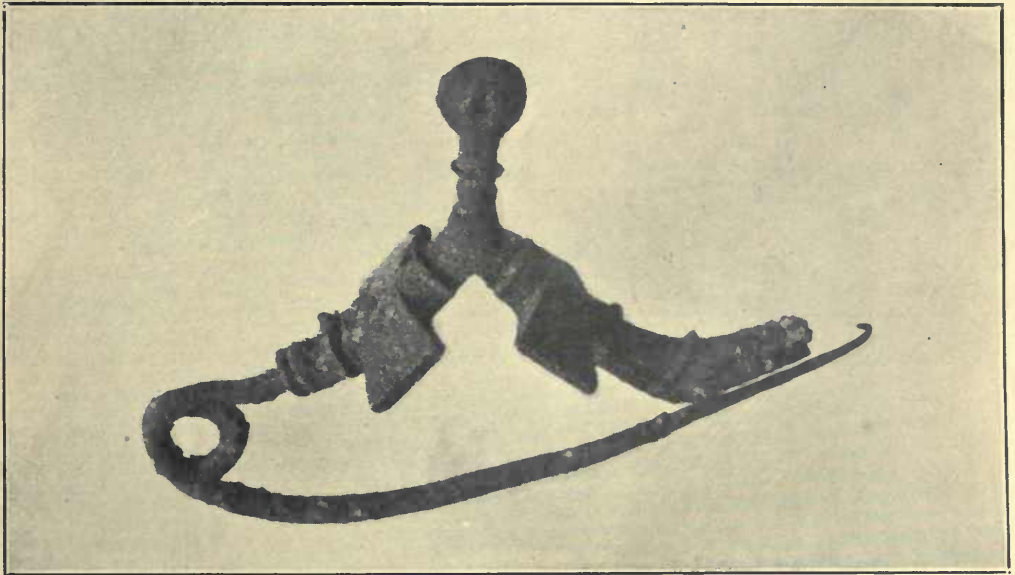
* *Ancient Egyptians*, p. 158-9.

† In *Anthropologie*, 1893, pp. 557 ff.

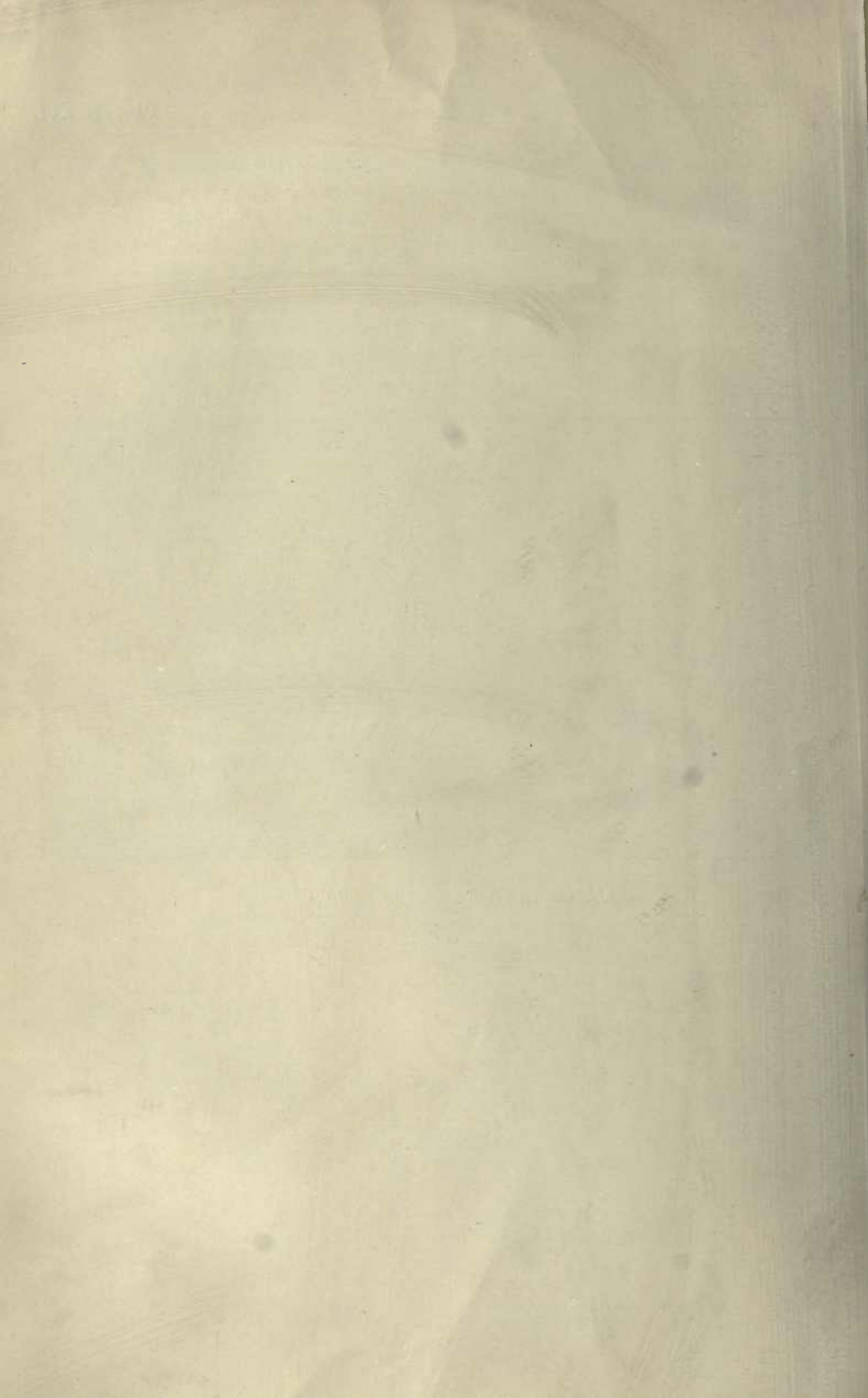
‡ *Papers of the British School of Rome*, V, p. 136.

pronounce more definitely. One thing, however, is certain, namely, that in this question *a priori* reasoning based on insufficient knowledge of the facts can never lead to truth. It would place discussion on a much higher level, would all those who wish to take part in it begin by making a minute study of such works as those of Pinza, Taramelli, Nissardi and Mackenzie on Sardinia, or of those of Zammit, Tagliaferro and Ashby on Malta, to mention only two small regions of the great area in which megalithic monuments occur.

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A CYPRIOTE FIBULA OF THE EARLY IRON AGE.



A CYPRIOTE FIBULA OF THE EARLY IRON AGE, NOW IN THE ASHMOLEAN MUSEUM

By JOHN L. MYRES

PLATE XVI

In the last volume of these *Annals* (pp. 138-144) I submitted a note on a type of fibula of the Early Iron Age, apparently peculiar to Cyprus, but derived, as I ventured to suggest, from one of those western types of fibula—called *fibula serpeggiante*, *fibula a gomito*, by Italian archaeologists—which have one or more loops in the bow in addition to a spring coil at the junction of bow and pin.

The transition from an elastic loop of this kind to a solid knob seemed to me to be recorded in one extant example of this type (now in the Cesnola Collection in New York), which has the solid knob hollowed on either side as if to copy the inner surface of such a loop. This detail conveys the impression that the maker of this fibula had not yet wholly forgotten that this part of the bow was properly intended to be elastic.

Since that note was published, another example of this type has been acquired by the Ashmolean Museum from Dr. Max Ohnefalsch-Richter, who obtained it from a native of Cyprus, together with a small pair of bronze tweezers which seems to be Graeco-Roman. He was not able, however, to learn any trustworthy account of its discovery. By the kindness of the Keeper of the Ashmolean Museum, I am permitted to publish it here.

The interest of this example is that it represents a stage of degeneration intermediate between that of the New York fibula (*Annals* III, Pl. XXXII, 8) and the commoner variety (Pl. XXXII, 4-7) in which the knob is pear-shaped or olive-shaped, and has no lateral hollows. Here, though the hollow exists, it no longer has the form of a loop, but is circular in plan, and a shallow cone in cross-section. The maker, that is, seems to have intended to copy a fibula like that in New York, but did not understand the meaning of the lateral hollows, and used the simplest means—an obtuse-angled drill—to produce the same general effect. From

this stage it was but a small step to omit the hollow altogether, as in the common variety; a fragmentary example of which, from the Cypriote tomb which I published in *Annals*, Vol. III, pp. 107-117, was the occasion of my former note on this type of fibula.

In the course of a long correspondence about this fibula and other matters, Dr. Ohnefalsch-Richter has called my attention to three points in my former note.

(1) He thinks that I ought to have quoted explicitly some remarks on this type of Cypriote fibula from his paper in the *Zeitschrift für Ethnologie* XXX, 1899, p. 342, cf. fig. xxv. At his request I give this reference now, but I am still under the impression that the eighteen lines which he devotes to this type in the *Zeitschrift* are in essentials an expansion of our joint work in the *Cyprus Museum Catalogue* (Oxford, 1899), p. 138; and this I duly quoted (*Annals*, Vol. III, p. 139, note 1).*

(2) He thinks that I ought to have quoted explicitly his remarks in the same paper (pp. 330-1, fig. xxii, see also p. 36) on the Cypriote tomb, now in the Leipzig Museum, which I discussed in *Annals*, Vol. III, pp. 107-117. I am sorry that I omitted to do so; and particularly that I omitted to verify the assurance which I had from him formerly, that the tomb was unpublished, and that, though he intended to publish it himself, in a long delayed volume, I was free in the meanwhile to write about it if I pleased. At his request I name now this previous 'publication' of the tomb—it occupies just twenty-five lines on pp. 331-2 of his paper. I take also this opportunity of referring the reader to my former note, in which Dr. Ohnefalsch-Richter's former interest in this tomb was in fact fully acknowledged.

(3) He also thinks that I ought to have mentioned, in connexion with this tomb, an essay on the Sigynnae by George Colonna-Ceccaldi, published in his *Monuments antiques de Chypre, de Syrie, et de l'Egypte*, 8vo, Paris, 1882. I am the more glad to make good this omission, because I know the book well, and have a high respect for the memory of Ceccaldi. But Ceccaldi's

* On reading his paper again, I find that in a footnote (i.e. note 3) he compares Sicilian fibulae, quoting B. Patroni, *Bull. Paletn. Ital.*, 1896, p. 32, fig. 30, but he gives no details or explanation.

suggestions about the Sigynnae did not seem to me to be of much value, and as I was not conscious that I owed anything to his essay, I did not see any need to quote it, in discussing a type of spear which had not been discovered when he wrote. After reading it again, I think so still; but at Dr. Ohnefalsch-Richter's urgent request, I take the first opportunity of calling public attention to it: regretting only that, if it really anticipates later studies, Dr. Ohnefalsch-Richter did not himself quote it when he 'published' this tomb in 1899.

SOME CULTS OF PREHISTORIC EGYPT

I

BY PERCY E. NEWBERRY

On certain examples of the Decorated* Pottery of Prehistoric Egypt are found drawings of ships† with emblems or cult-objects figured at their mast-head (fig. 1). These ships are apparently



FIG. 1. Decorated Vase (Newberry Collection).

* On this class of Pottery see Petrie, *Diospolis Parva*, p. 15.

† When drawings of these objects were first described and published objections were raised to identifying them as boats (Cecil Torr, *Sur quelques prétendus navires égyptiens*, in *l'Anthropologie* IX [1898], p. 33). But, as Prof. Petrie remarks 'the discovery of much larger and more elaborate paintings on the walls of a tomb at Hierakonpolis [*Hierakonpolis* II, pl. LXXV] have abundantly proved that we have here the earliest shipping yet known' (*Diospolis Parva*, p. 15). De Morgan (*Recherches sur es origines de l'Égypte* I, 1896, p. 161); Schweinfurth (*Ornamentik der ältesten Cultur-Epoch Ägyptens in Verhandlungen der b. Gesellsch. für Anthropologie, Ethnologie und Urgeschichte*, 1897, p. 400); Capart (*Les début de l'Art en Égypte*, 1904, p. 108); and most other Egyptologists agree that these drawings represent boats. Loret, however in the *Annales du musée Guimet*, XIX [1906], pp. 173-175, still refuses to admit them to be boats and asserts that they are villages with shrines. The drawing that he gives of one of these objects (p. 175, fig. 1) has been, it should be pointed out, adapted to suit his theory for he has actually omitted to show the tying-up rope at the prow and the three steering oars at the stern (!) and in place of the Elephant ensign he gives the Harpoon. His interpretation of the design given in fig. 2, p. 175, is based on this inaccurate drawing and is, therefore, most misleading. The particular boat that he figures I give in fig. 2, and I would advise those interested in the matter to compare my tracing with Loret's drawing.

large vessels or galleys with from twenty to sixty pairs of oars apiece. The prow of each vessel is decorated with one or more tree branches stuck upright upon it, and hanging from the prow is shown, in several instances, the end of the tying-up rope. At the stern, in two examples, are figured large steering oars (fig. 2).



FIG. 2. Boat on a Vase in the Ashmolean Museum.

Amidships each boat has two deck-cabins, and at the back of the aft-cabin is shown a pole, on top of which an emblem or cult-object is fixed; from near the top of, or from half-way up, the pole, two pendants are suspended. These poles correspond to the poles or 'perches' which were surmounted by sacred emblems in historic times, and the two pendants then appear as leopards' tails (fig. 3). From the fact that these ships carry sacred emblems



FIG. 3. The Sacred Perch.

there can be little doubt that they were sacred vessels used by the priests of a cult for the gods' journeys or visitations up or down river: that such visitations were of common occurrence, especially in early times, is proved by the inscriptions on the Palermo Stone,† where a 'visitation' is given as the principal event of certain years of the reigns of kings of the First Dynasty. The form of these

† Schäfer, *Ein Bruchstück Altägyptische Annalen*, p. 8.

sacred boats on the Palermo Stone is shown in fig. 4, and alongside I give a drawing of the Manzet-barque of Ra as it appears in the Pyramid Texts. It will be noted that in the latter we have the two deck-cabins with Falcons on their perches above them. The brick substructure for a large sacred vessel, dating from the reign of

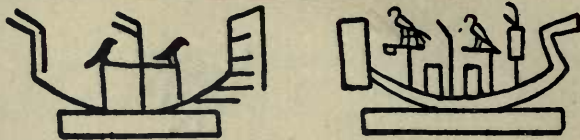


FIG. 4. Sacred Boats: (a) Palermo Stone; (b) Pyramid Texts

Ne-woser-re, was cleared by Borchardt at Abusir in 1901.§ In later times models of these sacred boats were constructed and were carried in procession by the priests at religious festivals. In one case a model of the prehistoric ship with the cult-sign upon it survives into historic times; this is in the ensign of the Seventh Nome of Lower Egypt, which represents a harpoon and boat surmounting the sacred perch (fig. 5).



FIG. 5. Emblem of the Harpoon Nome.

The vases upon which these prehistoric cult-signs are drawn have been found in graves from Kostamneh in Nubia in the south, to Gizeh in the north; they are very rare, and the average is perhaps not more than two or three per thousand graves explored. They belong to a class that is made of a peculiar kind of pottery, which in paste, colouring and decoration is unlike any other pottery that has been found in the Nile Valley.* So foreign does it appear that Professor Petrie at first suggested that the pottery was probably imported from some other people,† i.e., from a people outside Egypt. About one hundred and sixty of these vases have figures of boats drawn on their bowls; sometimes only one

§ *Ä.Z.* XXXIX, p. 5, *Abb.* 4.

* Petrie, *Naqada*, p. 40.

† *ibid.*, p. 40.

boat is figured on a vase, sometimes there are two, three, or even four boats depicted on the same vase. 'The great boats or galleys with long banks of oars show that the makers of these vases were not an inland people of the oases, but dwelt on some large river or sea.'‡ Often we see on them, and on other vases of the 'Decorated' class, one or more birds figured; these birds have been generally supposed to be ostriches, but the curved beak, which is very characteristic of them, shows that they really represent flamingoes (fig. 6). The flamingo is an extremely local bird; it



FIG. 6. The Flamingo. The figure on the left is from a Prehistoric Vase.

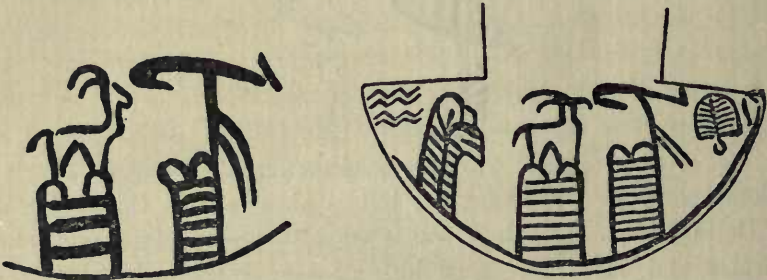
seldom occurs in Upper Egypt, but is abundant in the region of the Delta Lakes. On these vases we also find depicted stretches of water and lines of pointed hills or sand-dunes, which suggest hilly or sandy country like that along the western and northern edges of the Delta. These three points indicate at once a country like Lower Egypt, and when we examine the cult-signs of the boats we see that these point Delta-wards also.

A list of all the cult-signs which appear on these vases is given on pp. 137-142. On the one hundred and fifty-nine that I have catalogued there are two hundred and eighty-eight figures of boats with cult-signs. Of these, one hundred and sixteen bear the 'Harpoon' ensign, sixty-six the 'Hill' ensign, and fourteen the 'Crossed Arrows' ensign. These cults all survive into historic times—the 'Harpoon' is the ensign of the Seventh Nome of Lower Egypt, the 'Hill' was the early ensign of the Sixth Nome, and the 'Crossed Arrows' was the ensign of the Fourth and Fifth Nome of Lower Egypt. Thus it will be seen that out of the two hundred and eighty-eight boats with cult-signs, no less than one hundred and ninety-six belong to the Western half of the Delta. Twenty-two boats bear the 'Tree' or 'Tree-branch' ensign, which, as I

‡ *ibid.*, p. 40.

have shown elsewhere,* was the early cult-object of Herackleopolis. Nine boats bear the 'Thunderbolt' ensign of Ekhmîm. The Falcon on a curved perch appears at the mast-head of three boats, and this ensign undoubtedly represents the later Falcon of Hieraconpolis. The Elephant, which is found on a single vase, was perhaps the cult-animal of the people of Elephantine.

Besides the cult-signs already mentioned, and which we can locate with comparative certainty, there are also a few others which, unfortunately, we cannot be so sure about. On one boat there is over the aft-cabin a 'Harpoon,' and over the fore-cabin a 'Goat'; these two are found again on a prehistoric dagger handle in the Cairo Museum (fig. 7). The Goat is shown standing on the top of



Cult signs on a Vase (MacGregor Coll.).

Cult Signs on Dagger Handle (Cairo Mus.).

FIG. 7

the fore-cabin, and may possibly represent a cult-animal: if this be so, then it is perhaps the Goat of Mendes. The 'Throwstick' as an ensign upon a pole appears on three boats; this cult-object reappears in historic times as the deity Methen, who is mentioned in the Pyramid Texts,† and whose name is again found in a few theophorous personal names on stelae of the late Middle Kingdom.‡ Four cult-signs I cannot trace into historic times. These are:— the  which occurs on thirty-six boats; the  which is found on eleven; the  on three; and the  on one. The latter ensign is certainly not the later *ka*, for no hands are indicated.

(To be continued.)

* *Ä.Z.* XLIX.

† Ed. Sethe 952, and see also Spiegelberg, *Rec.* 16, 27.

‡ Cairo, *Cat. gen.* 20046, 20065, etc.

LIST OF VASES WITH CULT-SIGNS

By PERCY E. NEWBERRY

The following Collections contain one or more of these Vases, and I should be grateful if any Collectors who own specimens not included in my list would send me particulars of them. For notes on the examples in the Metropolitan Museum of Art, New York, and in the Boston Museum, I am indebted to Mr. A. C. Mace; and for notes of those at Brussels, I have to thank Monsieur Capart. The specimens in other collections I have catalogued myself. The abbreviations are used to denote the various collections in my list of Cult-signs: the small figure placed after the Collection number (*e.g.*, Brist. 100³) signifies that the cult-sign is figured on the vase two ² or three ³ times.

Ashm. = The Ashmolean Museum at Oxford.

Behrens = Randolph Behren's Collection at South Kensington.

Berl. = The Egyptian Museum at Berlin.

Bootle = The Museum at Bootle, Lancashire.

Boston = The Museum of Fine Arts, Boston, U.S.A.

Brist. = The Museum at Bristol.

Brit. = The British Museum.

Brus. = The Royal Museum, Brussels.

Cairo = The Cairo Museum.

Dattari = G. Dattari's Collection, Cairo.

Edinb. = The Archaeological Museum, Edinburgh.

Guimet = The Guimet Museum, Paris.

Kelek = D. Kelekian's Collection, Paris.

L. = The Egyptian Museum of the Louvre.

L.-Smith = Linton Smith's Collection, Blundellsands, Lancashire.

Leyden = The Leyden Museum.

LIA. = The Institute of Archaeology of the University of Liverpool.

Lyons = Palais des Arts, Lyons.

Manc. = The Manchester Museum.

MG. = W. MacGregor's Collection, Tamworth.

MMA. = Metropolitan Museum of Art, New York.

Murch = The Murch Collection (now at Chicago).

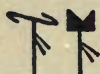
Newb. = P. E. Newberry's Collection, Liverpool.

Petrie = Flinders Petrie's Collection, University College, London.

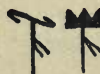
Rea = James Rea's Collection, Eskdale, Cumberland.



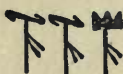
Ashm. 1895/572², 1895/605
 Berl. 13051. 13823. 14166
 14361. 14363²
 Brist. 100². 226²
 Brit. A 16793². 26636²
 26657². 36326
 Brus. 1715 (=Naqada 852),
 1931 (=Naqada 810)
 Cairo. 11566. 11567²
 Edinb. 590
 Guimet. One
 LIA. Three²
 MG. 3370²
 Manc. One² (=Naqada 562)
 MMA. 07/228/134. Two
 others²
 Murch. One²
 Newb. Three²
 Petrie. One²
 Cairo and Luxor Dealers.
 Six²



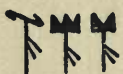
Brist. 225
 Cairo. One
 LIA. One
 MMA. 07/228/60 and another
 Petrie. One
 Rea. One
 Luxor and Cairo Dealers.
 Four



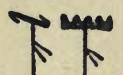
Berl. 14362
 Cairo. 11569



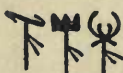
Leyden A III. 82



Cairo Dealer. One



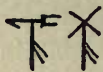
Brit. A. 36328.
 MG. 3367
 MMA. One



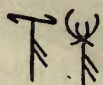
Brit. 36328
 Petrie (= Naqada LXVII. 12
 from Abydos)



Ashm. (= *Diospolis Parva*
 XX. 11)
 Boston. 99/712



Diospolis Parva XX. 9



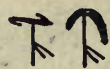
Ashm. 1895/600/1209 (= *Naqada* LXVII. 11).
 Another *Naqada* LXVI. 7
 Berl. $\frac{12 \text{ g } 10}{1}$
 Bootle. One
 Cairo. One
 MG. 3369
Naqada LXVII. 7
 Newb. Two
 Cairo and Luxor Dealers. Four



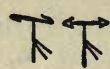
Ashm. 1895/595/1268 (= *Diospolis Parva* XX.
 1 & 2)
 Manc. 5299 (Gerzeh
 MMA. 07/228/125
 Cairo Dealers. Three



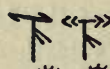
Naqada LXVI. 3



Dattari. One



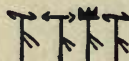
Leyden. A. III. 69



Luxor Dealer. One



LIA. One



Naqada LXVI. 8



MG. 3493



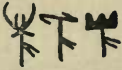
Behrens. One²
 Brist. 88² (= *El Amrah* XIV.
 D. 51) 104

	<i>ctd.</i>	Brit. 36327 ^a Cairo. One ^a Kelek. One ^a LIA. One ^a Manc. One ^a (= <i>Naqada</i> 1840) Petrie. One ^a Cairo and Luxor Dealers. Five ^a		Ashm. 1895/577/1873 (= <i>Naqada</i> LXVI. 10)
				LIA. One
				Petrie. One
				MMA. One
				Berl. $\frac{1024}{2}$
				LIA. One ^a
				Lyons ^a
				MMA. One ^a
				LIA. One
				Two
				One
				One
				Petrie (= <i>Naqada</i> LXVI. 9 from Abydos)
				<i>Naqada</i> LXVI. 9
				Petrie. One
				Berl. 13824. 13826 ^a
				Brist. 164
				Cairo. Three
				L.-Smith. One
				Manc. 3755 ^a (Edfu)
				MMA. Two (one with ^a)
				Petrie. One
				Rea. One ^a

* Where names of the Collections are not given, the numbers refer to the number of vases on which the cult-signs occur; the Museum references will be found under the *second* cult-sign figured (e.g., for the eleven examples of see under).



Eleven



Two



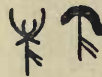
One



One



Ashm. 20/5/1891
Brist. One (El Amrah ?)
Brit. 26635



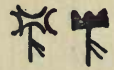
Berl. 13227



Diospolis Parva XX. 4 (= Brist. 164)



MMA. 07/228/136
Petrie. Two (one with²)
L. One



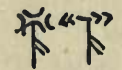
One



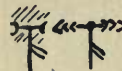
One



One



Berl. 14317
MMA. 07/228/126
Nagada LXVI. 6



Cairo, One



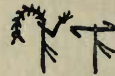
None alone



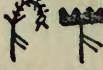
Six



One



One



Four



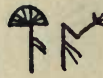
One



One

*Nagada* LXVI. 9

Three



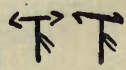
Newb. One



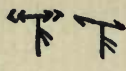
One



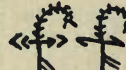
Berl. One
Newb. One



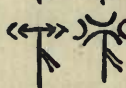
One



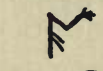
One



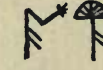
One



Four



None alone



One



One

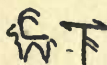
Murch. One²



One



One

Ashm. 1895/684² (= *Naqada*
LXVII. 14)Ashm. One² (= *Diospolis*
Parva XVI. 41)
Newb. (Kestamneh).

One



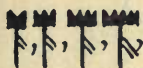
One

Total number of Vases catalogued 159. Number of boats figured 288.



Occurs alone on 38 Vases with 65 boats.

with other cult-signs on 51. Total 116.



alone on 22.

with other cult-signs on 44. Total 66.



alone on 6.

with others on 8. Total 14.



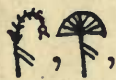
alone on 12.

with others on 24. Total 36.



alone on 4.

with others on 8. Total 12.



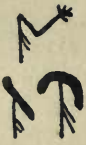
not found alone.

with others on 22. Total 22.



alone on 2.

with others on 7. Total 9.



Occurs with others on 3. Total 3.

alone on 1.

with others on 2. Total 3.



alone on 2. Total 2.

alone on 3. Total 3.

with another on 1. Total 1.



with another on 1. Total 1.



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